

## **20 DECEMBER 2011**

## ANNEX III TO RESPONSES TO COMMENTS DOCUMENT (RCOM) ON ECHA'S DRAFT 3<sup>RD</sup> RECOMMENDATION FOR THE GROUP OF RECOMMENDED COBALT(II) SUBSTANCES - COMMENTS ON COBALT(II) DINITRATE (EC NUMBER: 233-402-1)

THIS DOCUMENT PROVIDES THE COMMENTS RECEIVED ON COBALT(II) DINITRATE DURING THE PUBLIC CONSULTATION ON THE 3<sup>RD</sup> DRAFT RECOMMENDATION FOR INCLUSION OF SUBSTANCES IN ANNEX XIV OF REACH WHICH TOOK PLACE BETWEEN 15 JUNE AND 14 SEPTEMBER 2011. ECHA'S RESPONSES TO THESE COMMENTS ARE PROVIDED IN THE ABOVE MENTIONED RCOM DOCUMENT.

*N.B.:* All public attachments are provided in a separate zip-file available on ECHA's website (attachments claimed confidential are not provided with the public version of this compilation of comments received).

**I** - GENERAL COMMENTS ON THE RECOMMENDATION TO INCLUDE THE SUBSTANCE IN ANNEX XIV, INCLUDING THE PRIORITISATION OF THE SUBSTANCE:

#	Date	Submitted by	Comment
	(Attachment	(name,	
	provided)	Organisation/	
		MSCA)	



1830	2011/09/14 21:54 File attached	Cobalt REACH Consortium Ltd (CoRC)/Cobalt Development Institute (CDI)	The Secretariat of the Cobalt REACH Consortium Ltd (CoRC) has prepared a Technical Annex for this cobalt substance to support the Joint Response Comments that have been submitted (separately) into the current consultation. The preparation of the Joint Response Comments has involved participation of the Consortium member companies who are the major manufacturers/importers of cobalt substances in Europe,
	Confidential	BehalfOfAnOrg anisation Industry or trade association United Kingdom	as well as several Downstream Users that are also members of the Consortium. Further information has also been collected from industry stakeholders using two surveys: a stakeholder mapping survey, and a supply/value chain study. These studies were undertaken in order to collate and refine information available from the cobalt industry on volumes, exposure and uses. The surveys were cascaded along the supply chains to gather a more complete picture of the uses and supply/value chains than has been available previously. Information collected from the responses to these two surveys has been combined and summarised and is presented in the supporting Technical Annex to the Joint Response Comments. A copy of the Technical Annex document has been submitted into the current consultation as a CONFIDENTIAL attachment. The Consortium has also prepared a collation of the short-form versions of the Exposure Scenarios for this cobalt substance as an appendix to the Technical Annex. A copy of this accompanying document is also provided as a CONFIDENTIAL attachment. There are two other appendices to the Technical Annex which include papers that present further information regarding the threshold mechanism for cobalt compounds, and the essentiality of cobalt compounds. These two papers have been submitted into the current consultation (separately) as attachments to the response comments provided by the CDI (Cobalt Development Institute).
1826	2011/09/14 21:37	BehalfOfAnOrg anisation Industry or trade association Germany	Some of our member companies produce portable products with batteries. According to our information the producers of the batteries use Cobalt(II) dinitrate as intermediates. Our understanding of the REACH regulation is that intermediates are exempt and we consider this to be appropriate and would oppose the suggestion that Cobalt(II) dinitrate for that use effectively be banned.



1807	2011/09/14 20:51 File attached	ACEA - European Automobile Manufacturers Association	According to the available data we see no basis for an inclusion of the hard chromium plating from Chromium trioxide (-solutions) in Annex XIV of the REACH regulation. See also attached Joint association letter sent to ECHA Executive Director on 20th October 2010.
		BehalfOfAnOrg anisation Industry or trade association Belgium	
1790	2011/09/14 19:55	European Federation of pharmaceutical Industries and associations BehalfOfAnOrg anisation International organisation Belgium	EFPIA has noted with interest the call by ECHA of June 2011 for comments on proposals to include a number of new substances, including Cobalt dinitrate, in Annex XIV of the REACH Regulation as substances of very high concern (SVHCs) which would require authorisation for their use. A number of these substances including cobalt dinitrate have critical uses in the research, manufacture and control of medicinal products for which there are, at this time, no practical alternatives. The details relating to cobalt dinitrate are set out below and EFPIA asks that, if it is to be included in Annex XIV, it be exempted from the necessity for authorisation for its use in research, development, manufacture or anlytical control of medicinal products and their ingredients and for any corresponding uses in relation to medical devices.



1779	2011/09/14		Kobalt(II)-salze finden bei mbw in den Cr(III)-haltigen Passivierungslösungen für Zn- und Zn-
	19:38	BehalfOfAnOrg	Legierungsschichten Anwendung. Vorrangig wird dabei Kobalt(II)-nitrat verwendet. Andere
		anisation	Kobaltsalze sind für die o. g. Passivierungen jedoch grundsätzlich möglich.
	File attached	Company	Arbeitsschutz:
	File attached Confidential		Arbeitsschutz: Bei sachgemäßer Anwendung der kobalthaltigen Lösungen und Verwendung der vorhandenen persönlichen Schutzausrüstung besteht keine Gefährdung für die Mitarbeiter. Die persönliche Schutzausrüstung besteht dabei aus geeigneter Arbeitskleidung sowie chemiebeständigen Handschuhen. Aufgrund der vorhandenen Absaugeinrichtungen kann eine Gefährdung durch Stäube und/oder Nebel ausgeschlossen werden. Alternativverfahren: Aufgrund der hohen Korrosionsschutzanforderungen an Zink- und Zinklegierungsschichten gibt es zu kobalthaltigen Passivierungslösungen keine adäquaten Alternativen. Passivierungsschichten ohne Kobalt erfüllen die Anforderungen der Kunden, welche vorrangig aus der Automobilindustrie stammen, nicht. Vergleichbare Korrosionsergebnisse können nur mit Chrom(VI)-haltigen Lösungen erreicht werden. "Mit der EU-Richtlinie 2000/53/EG des Europäischen Parlaments über Altfahrzeuge sowie nachfolgend der EU-Richtlinie 2002/95/EG (Elektroschrottverordnung) wurde der Einsatz von Chromatierschichten für Pkw und Elektrobauteile verboten." (Quelle: Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)- carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011 - Einsatz der zweiwertigen Kobaltsalze in KONVERSIONSSCHICHTEN In der europäischen GALVANOTECHNIK. – als Anlage hochgeladen) Weitere Betrachtungen In dem als Anlage hochgeladenen bereits oben zitierten Kommentar des ZVO sind die Auswirkungen für die Wirtschaft zu entnehmen. Dem ist grundsätzlich nichts hinzuzufügen. Die Erzeugung von in kobalthaltigen Lösungen passivierten Zink- und Zinklegierungsschichten erfolgt branchenübergreifend für viele Kunden. Einen hohen Anteil stellen dabei international agierende Partner der Automobil- und Fensterbeschlagindustrie dar. Bei einen Verbot der Kobaltsalze enststeht der mbw-Gruppe ein deutlicher internationaler Wet
			Fortführung der Geschäftsbeziehung ist damit erheblich gefährdet. Verbunden damit ist die Gefährdung der ca. 300 Arbeitsplätze der mbw-Gruppe. Einen hohen Anteil des Umsatzes wird mit Kunden aus der Automobil- und
			Fensterbeschlagindustrie erzielt. Bei einen Verbot der Kobalt(II)-salze wäre die mbw-Gruppe mit ca. 300 Mitarbeitern deutschlandweit so stark betroffen, dass eine Fortführung der



			Geschäftsbeziehungen und somit der Erhalt der Arbeitsplätze ernsthaft gefährdet ist. "Ein Verbot des Einsatzes von Kobaltsalzen in Passivierungen würde den Korrosionsschutz der beschichteten Teile deutlich vermindern und damit negative Auswirkungen auf die Langlebigkeit und Nachhaltigkeit des industriellen Wirtschaftens in Europa haben. Verstärkter Rohstoffeinsatz und zusätzlicher Energieverbrauch wäre die Folge und würde die europäischen Klimaschutzziele und Senkungsbestrebungen zum CO2 Ausstoß belasten." (Quelle: Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)- carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011 - Einsatz der zweiwertigen Kobaltsalze in KONVERSIONSSCHICHTEN In der europäischen GALVANOTECHNIK. – als Anlage hochgeladen)
1760	2011/09/14 18:58	Association of the British Pharmaceutical Industry	
		BehalfOfAnOrg anisation Industry or trade association United Kingdom	



1744	2011/09/14	The Cobalt	CDI Comments for ECHA Public Consultation for Cobalt Salts – September 2011
1/77	18:41	Development	The Cobalt Development Institute (CDI) is an international organisation of a wholly non-profit
	10.41	Institute	making character which has been in existence for over 50-years. The CDI is an association of
		Institute	-
			producers, users and traders of cobalt. The CDI has the following objectives:
			(1) Promoting the responsible and sustainable use of cobalt in all forms.
		BehalfOfAnOrg	(2) Consulting organisations, agencies and governments for research or investigations in all
		anisation	matters concerning cobalt.
		Industry or	(3) Providing members with topical information on all cobalt matters including health & amp;
		trade	safety and environmental legislation plus regulatory affairs possibly affecting their interests.
		association	(4) Promoting co-operation between members and providing a forum for the exchange of
		United	information concerning the resources, production and uses of cobalt.
		Kingdom	Membership of the CDI includes 32 member companies from 16 countries including all the major
			cobalt producers.
			The Board of the CDI has also established three Cobalt REACH Consortia to implement REACH on
			behalf of the cobalt industry. A separate wholly-owned subsidiary of the CDI called CoRC (Cobalt
			REACH Consortium Ltd.) acts as the Secretariat to the Consortia.
			This submission is being made in conjunction with formal submissions made by CoRC on behalf
			of the Members of the Cobalt REACH Consortium, and we also provide a confidential Technical
			Annex relating to this cobalt salt.
			REACH has many ambitions and compelling aims to protect EU citizens and workers from
			exposure to chemicals, and these are supported by Industry. Over the past five years since
			adoption of the REACH regulation, the cobalt industry has taken its responsibility to comply with
			the financial, technical, scientific and administrative burden. By 1st December, 2010 the
			registration of cobalt and the relevant cobalt compounds (18 in total) had been completed and
			we are currently continuing with our efforts to ensure that we contribute to the evaluation
			process. The Cobalt Consortium has already expended some Euro 7million and work continues
			for the remaining twelve substances covered by the Consortium.
			The Dossier (Technical Annex)(i) prepared for cobalt dinitrate shows that:
			- the actual tonnage of cobalt dinitrate used in the EU market is significantly lower than
			quoted in the ECHA consultation document from REACH registration data.
			- it is largely used as an intermediate (~90 % of uses) in the manufacture of catalysts,
			batteries and other chemicals, which is not subject to Authorisation (ii) .
			- the remaining non-intermediate uses, are limited, such as surface treatment (10% of
			which the use is primarily as an intermediate) and corrosion prevention in industrial water



<ul> <li>systems (&lt;&lt; 1%).</li> <li>Therefore the vast majority of the uses identified are not considered to be within the scope of Authorisation.</li> <li>all uses identified are for industrial uses only, therefore the exposure is limited to workers and there is no expected exposure of professional users from the identified uses.</li> <li>the occupational environment operates under tightly controlled conditions which are already regulated under existing Community legislation such as the exposure to carcinogens and mutagens at work directive (2004/37/EC), or the risk related to chemical agents at work directive (98/24/EC), DSD (67/548/EEC), DPD (99/45/EC).</li> <li>A strict control of environmental risk is ensured by the requirements of Directive 96/61/EC concerning integrated pollution prevention and control (IPPC) and Directive 2008/I/EC on the control of major accident hazards involving dangerous substances (Seveso II).</li> <li>cobalt dinitrate does not reach the consumer as is it not marketed as an end product and nor has it a wide-dispersive use.</li> <li>cobalt is a natural element that is essential in humans and some animal species, who are unable to synthesise sufficient quantities of Vitamin B12. While low levels of Vitamin B12 intake can be associated with diseases of deficiency, the ingestion of large amounts of Vitamin B12 has not been reported to be toxic to humans. Its ubiquitous and constant presence in the body tissues is indicative of the fact that low dietary levels of cobalt have no health impact.</li> <li>although cobalt dinitrate is identified as a CMR 1B by inhalation substance, guideline compliant studies indicate it may not be genotoxic in vivo. The CORC has recently provided ECHA with information on a potential concentration threshold mode of action for carcinogenicity. A report on the threshold mechanism has been uploaded with this response (ii).</li> <li>no reports of carcinogenicity and genotoxicity associated with cobalt ingestion have been reported in humans or in animals. A</li></ul>
The exposure assessments developed by the CoRC for the REACH registration demonstrate that all registered uses of cobalt dinitrate can demonstrate effective control of exposure and can be considered as safe uses (i.e. RCR value



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1676	2011/09/14 16:58	SETS BehalfOfAnOrg anisation Company France	Processes using dinitrate de cobalt have been produced as alternatives to passivate films with chromium VI. Results in terms of corrosion resistance are as good as those obtained with chromium VI. Concentrations of cobalt dinitrate is low in our solutions.
1675	2011/09/14 16:56	Health and Environment Alliance BehalfOfAnOrg anisation International NGO Belgium	We support the nomination of Cobalt dinitrate to Annex XIV



1653	2011/09/14 16:21	PortugalPortug uese Environment Agency MemberState Portugal	Taking into consideration the wide dispersion use of the substance "Cobalt(II) dinitrate", we consider that this substance fullfills the prioritisation criteria. We therefore support ECHA's recommendation for inclusion of this substance in annex XIV. We also support the proposed application and sunset date.
1619	2011/09/14 15:41 File attached	Individual France	The use of Cobalt dinitrate in surface treatment doesn't meet the criteria of prioritisation. Very low exposition for automatic process. Cobalt dinitrate is used in the galvanic industry not as a substance but as a preparation. Environmental exposure controlled by regulation.



1612	2011/09/14 15:26	BehalfOfAnOrg anisation Company United Kingdom	Reason for use: this company uses cobalt dinitrate (supplied to us within a solution) to passivate zinc nickel plating black. Tonnage: we use less than 10kg/year of cobalt dinitrate. Release: no cobalt dinitrate remains in the passivated plating, so users of the plated item are not exposed to cobalt dinitrate from it. Annual air monitoring shows the plating employees (approx 12 of them) are exposed to levels of
1598	2011/09/14 15:00	Wieland GmbH BehalfOfAnOrg anisation Company Germany	Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011 Einsatz der zweiwertigen Kobaltsalze in KONVERSIONSSCHICHTEN In der europäischen GALVANOTECHNIK 2 1 Präambel Die Galvano- und Oberflächentechnik ist eine wichtige Schlüssel- und Querschnitts- Technologie und damit einer der Motoren des technischen Fortschritts. Innerhalb der Galvanotechnik bilden Zink und Zinklegierungen mit nachfolgenden Konversionsschichten für den kathodischen Korrosionsschutz von Stahlbauteilen einen besonderen Schwerpunkt mit wachsender Bedeutung. Ressourcenschonung und CO2-Minderung erfordern langlebige Wirtschaftsgüter mit optimierten technologischen Eigenschaften. Zink- und Zinklegierungsbeschichtungen mit



darauf abgeschiedenen Konversionsschichten tragen auf Grund ihrer korrosionsschützenden Eigenschaften wesentlich zur Erreichung dieser Ziele bei. Generell kann gesagt werden, dass Zink/Zinklegierungen optimalen Korrosionsschutz mit geringstem Materialeinsatz und niedrigen Kosten ermöglichen. Die Verwendung von Cobalt(II)-salzen und ihre Bedeutung für die Oberflächentechnik, den Maschinen- und Anlagenbau, den Automobilbau, Verbesserung der Haftung von aufzutragenden Lackschichten und weitere Industriezweige, wie z.B. Bauindustrie in Europa muss eine Zukunft haben, um die spezifischen Eigenschaften für die Anwendung von galvanischen Korrosionsschutzsystemen unter Verwendung von Zink- und Zinklegierungsschichten mit nachfolgenden Konversionsschichten zu erhalten. Der Kommentar richtet sich an die Europäische Chemikalienagentur (ECHA), bezüglich des Vorschlags zur Priorisierung von Co(II)-Salzen (Kobaltsulfat, -nitrat, -chlorid undacetat) zur Aufnahme in den Anhang XIV der REACh – Verordnung. Der Zentralverband Oberflächentechnik e.V. kann auf Grund der unten angeführten Argumente die Aufnahme der Kobalt-Salze in den Anhang XIV der REACh-Verordnung
nicht unterstützen. Im Falle der Aufnahme dieser Stoffe in den Anhang XIV der REACh-Verordnung fordert der ZVO eine Ausnahme von der Zulassungspflicht für die Verwendung von Co(II)-Salzen (Kobaltsulfat, -nitrat, -chlorid und -acetat) zum Zwecke der Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen. 3
<ul> <li>2 ALLGEMEINES</li> <li>Bei der Erzeugung von Konversionsschichten werden die verzinkten Bauteile in eine Behandlungslösung, die entweder dreiwertige oder sechswertige Chrom-Verbindungen enthält, eingetaucht. Die Lösungen reagieren chemisch mit der Metalloberfläche und erzeugen dünne, ca. 30 bis 1.000 Nanometer (nm) starke Umwandlungsschichten, die sogenannten Konversions- oder Passivierungsschichten.</li> <li>Die Langlebigkeit von Bauteilen hängt in sehr starkem Maße von der zusätzlichen Korrosionsschutzwirkung der Konversionsschicht ab. Die Konversionsschichten verzögern den Erstangriff auf die metallische Schutzschicht aus Zink bzw. Zinklegierung. Sie werden aus diesem Grunde überwiegend zur Erhöhung der Korrosionsbeständigkeit z.B. von verzinkten Bauteilen im Automobil angewendet.</li> <li>2.1 Chemische Verfahren zur Erzeugung von Konversionsschichten basierend auf dreiwertigen Chromverbindungen</li> </ul>



korrosionsschützenden Konversionsschichten wurden schon in den 30er Jahren des 20. Jahrhunderts eingesetzt. Mit der EU-Richtlinie 2000/53/EG des Europäischen Parlaments über Altfahrzeuge sowie nachfolgend der EU-Richtlinie 2002/95/EG (Elektroschrottverordnung) wurde der Einsatz von Chromatierschichten für Pkw und Elektrobauteile verboten. Mit großen Anstrengungen von Zulieferindustrie, Beschichtungsbetrieben und Automobilindustrie wurden zunächst nur labormäßig verfügbare sogenante Passivierungen auf Basis dreiwertiger Chromverbindungen zur Marktreife gebracht. Dabei stellte sich heraus, dass ein vergleichbarer Korrosionsschutz, wie er aus sechswertigen Chromatierungen erzielbar ist, nur mit Zusatz von Kobaltsalzen in den dreiwertigen Passivierungslösungen möglich ist. Mit Stöcktag 1. Juli 2007 wurden zur Nachbehandlung von verzinkten/ zinklegierungsbeschichteten Bauteilen für bauartmäßig neu zugelassene Pkw nur noch dreiwertige Passivierungen eingesetzt. Auch für die meisten anderen Anwendungen haben sich diese Systeme am Markt etabliert. Die Lösungen zur Erzeugung von Konversionsschichten enthalten weiterhin Neutralsalze, die zum Teil auch im Lebensmittelbereich Anwendung finden. Hier sind u.a. Natriumfluorid (Zahnpasta) und Natriumiritar zu nennen. Die eingesetzten dreiwertigen Chromverbindungen bilden mit den Neutralsalzen Komplexe und reagieren mit der Metalloberfläche des eingetauchten Bauteils. Auf diesem Wege entstehen geeignete Chrom(VI)-freie Konversionsschictten. Es zeigt sich, dass Cr(III)-basierte Passivierungen nur dann mit hohem Korrosionsschutz möglich Sind, wenn den Applikationslösungen Kobaltsalze zugesetzt werden und Kobalt als Hydroxid (feuchter Zustand) bzw. Oxid (getrockneter Zustand) mit < 2 % bezogen auf die Konversionsschicht in diese eingelagert Wird. Der Zusatz von Kobaltsalzen is insbesondere erforderlich, wenn der Korrosionsschutz auch in warmen bzw. heißen Umgebungen gefordert ist (z.B. Motorraum, Bremsen, Getriebe usw. sowie Elektroteile in Gehäusen usw.). Hier sind kobalthalti		Lösungen auf Basis sechswertiger Chrom-Verbindungen zur Erzeugung von
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3 Mögliche Gesundheitsgefahren		unverzichtbar.
		4
		3 Mögliche Gesundheitsgefahren



	Akute Toxizität, dermal:
	Werte für eine Aufnahme löslicher Kobaltsalze über die Haut liegen nicht vor, eine
	sensibilisierende Wirkung auf die Haut wird aber vermutet.
	Akute Toxizität, Inhalation
	Werte zur akuten Toxizität von löslichen Kobaltverbindungen durch Inhalation liegen nicht
	vor. Aus zweijährigen Studien an Ratten besteht jedoch der Verdacht einer chronischen
	Toxizität mit Schädigung der Atmungsorgane.
	3.1.1 Bewertung der Messwerte
	Eine gesundheitliche Schädigung durch unbeabsichtigte orale Aufnahme löslicher
	Kobaltsalze besteht nicht. In Bereichen, wo mit Kobaltsalzen oder kobaltsalzhaltigen
	Gemischen gearbeitet wird, besteht ein striktes Verbot der Aufnahme von Lebensmitteln
	und striktes Rauchverbot. Eine unbeabsichtigte Aufnahme kann daher ausgeschlossen
	werden.
	Eine Sensibilisierung der Haut kann ebenfalls ausgeschlossen werden. Hier besteht ein
	ausreichender Schutz durch Anlegen von persönlicher Schutzausrüstung (Handschuhe,
	Schutzkleidung). Der Arbeitgeber ist verpflichtet, die Einhaltung der Verpflichtung zum
	Tragen persönlicher Schutzausrüstung zu kontrollieren.
	Die mögliche Gefährdung durch Einatmen von kobaltsalzhaltigen Aerosolen oder
	Partikeln wird anlagentechnisch durch geeignete Absauganlagen verhindert. Die
	Wirksamkeit dieser Schutzmaßnahmen wird durch regelmäßige Arbeitsplatzmessungen
	durch die technischen Aufsichtsdienste der Berufsgenossenschaften kontrolliert. Bei einer
	Messung, die 2004 in einem Betrieb durchgeführt wurde, der eine kobaltsulfathaltige
	Passivierung zur Passivierung von galvanisch abgeschiedenen Zinkschichten im Einsatz
	hat, wurde an mehreren Messstellen im Betrieb gemessen. Die Ergebnisse waren wie
	folgt:
	Messplatz Messwert Kobalt
	1 < 1 mg/L gefällt werden.
	Derzeit gibt es für Galvaniken und diesen Parameter noch keinen Grenzwert in der AbwV
	bzw. im Anhang 40 zu dieser Verordnung.
	5 Wirtschaftliche Bedeutung von Passivierungs- und Konversionsschichten
	auf Zink und Zinklegierungen
	5.1 Wirtschaftliche Bedeutung der Beschichtungsbetriebe für Europa
	Der Absatz von reinen Passivierungslösungen (Chrom(III)-basiert) und Chromatierungen
	(Chrom-VI)-basiert) für die galvanische Verzinkung in Europa beträgt etwa 40 Millionen
	Euro, davon etwa 16 Millionen € in Deutschland. Dies entspricht einem Kosten- bzw.



	Umsatzanteil von etwa 2,5 % bei den Galvanisierbetrieben, die Zinkbeschichtungen
	ausführen. Daraus errechnet sich ein Fertigungsvolumen bei den Beschichtungsbetrieben
	von europaweit etwa: 1.600 Millionen Euro.
	Die europaweite Wertschöpfung von etwa 1.600 Millionen Euro, die durch Betriebe der
	galvanischen Verzinkung generiert wird, ist bei einem Verwendungsverbot von Kobalt(II)-
	salzen in Europa direkt betroffen.
	<ul> <li>Der Anteil an Kobalt-relevanten Anwendungen beträgt etwa 1.200 Mio. Euro</li> </ul>
	Der Fertigungsanteil deutscher Betriebe am europäischen Markt beträgt etwa 40%. Das
	Fertigungsvolumen der Verzinkungsbetriebe beträgt damit für Deutschland etwa 640
	Millionen Euro. Davon beträgt
	<ul> <li>der Anteil an Kobalt-relevanten Anwendungen etwa 480 Mio. Euro</li> </ul>
	5.2 Gesamtwirtschaftliche Bedeutung der Konversionsbeschichtung
	5.2.1 Beispiel Automobilindustrie in Deutschland
	Ein Umsatzanteil von etwa 45 % der von Verzinkungsbetrieben beschichteten Bauteile
	geht in die Automobilindustrie, z.B. für Gehäuse, Befestigungsschienen, Bremsenteile,
	Rohrleitungen, Sicherheitsschellen, Getriebe- und Stossdämpferkappen, Kraftstoffpumpen,
	Schrauben, usw. Laut VDA (Stand 25.03.2011) wurden in 2010 in Deutschland
	5.552.409 PKW gebaut sowie 353.576 Nutzfahrzeuge.
	Bei einem Durchschnittverkaufspreis von in Deutschland hergestellten PKW von ca.
	25.000 € (Annahme VDA) ergibt sich damit ein Fertigungsumfang von 140.000 Mio. €
	allein in der deutschen Automobilindustrie, der zur Sicherstellung von Langlebigkeit und
	Funktionssicherheit zahlreiche verzinkte Bauteile erfordert (geschätzt: etwa 500 -1.000
	Bauteile mit Konversionsbeschichtung auf Zink bzw. Zinklegierung pro Fahrzeug).
	Wenn der finanzielle Rahmen nicht berücksichtigt wird und nur die für den Automobilbau
	in Deutschland veredelten Artikel mit > 500 Teilen pro Pkw berechnet werden, bedeutete
	dieses, dass ohne die Veredlung mit galvanischen Zinkbeschichtungsprozessen mehr als
	2,8 Milliarden Teile pro Jahr nicht mehr in den Galvaniken bearbeitet würden.
	7
	5.2.2 Beispiel Fensterbeschlaghersteller in Europa
	Ein Umsatzanteil von etwa 20 % der von Verzinkungsbetrieben benötigten
	Spezialchemikalien geht in die Herstellung von Beschlägen für den Fensterbau. Der
	Gesamtbedarf an chemischen Produkten für die galvanische Oberflächenveredlung in
	diesem Segment beträgt in Europa etwa 25 Mio. Euro pro Jahr, davon etwa 8 Mio. € für
	kobalthaltige Passivierungen.
	Ein sehr großer Teil der Beschichtungen wird in Deutschland, Frankreich, Slowenien und



	Österreich ausgeführt. Die galvanische Veredlung von Fensterbauteilen trägt mit einem
	Umsatzanteil von etwa 100 Mio. Euro pro Jahr zum europäischen Sozialprodukt bei und
	bewirkt durch einen hohen Anteil manueller Arbeit gesicherte Arbeitsplätze für etwa 3.000
	Menschen.
	Insgesamt generieren die europäischen Hersteller von Fenster- und Türbeschlägen einen
	Jahresumsatz von etwa 3.000 – 4.000 Mio. € und beschäftigen etwa 16.000 – 20.000
	Mitarbeiter.
	6 Zusammenfassung
	Unverzichtbare Eigenschaft beschichteter Stahlteile, die in allen Bereichen von Industrie,
	Gewerbe und auch im Haushalt zum Einsatz kommen, ist der kathodische
	Korrosionsschutz mittels Zink und Zinklegierungsschichten, der durch
	Konversionsschichten verstärkt wird. Die galvanische Korrosionsschutzbeschichtung
	verlängert die Nutzungsdauer von Stahlteilen um die Faktoren von 20 – 100 und leistet so
	einen wesentlichen Anteil daran, dass eine ressourcenschonende Industrie und Wirtschaft
	erst möglich wird.
	Zur Anwendung kobaltfreier Passivierungen liegen bisher nur begrenzte
	Praxiserfahrungen vor. Hier ist noch eine umfangreiche Erprobung durch die
	Galvanisierbetriebe erforderlich; Optimierungen und Anpassungen in der
	Applikationstechnik müssen erarbeitet werden. In weiten Bereichen sind
	Sicherheitsaspekte zu berücksichtigen. Es sind derzeit keine Kobalt freien Passivierungen
	am Markt, die bei einer Temperaturbelastung der gefertigten Artikel einen nur annähernd
	gleichen Korrosionsschutz bieten.
	Ein Verbot des Einsatzes von Kobaltsalzen in Passivierungen würde den
	Korrosionsschutz der beschichteten Teile deutlich vermindern und damit negative
	Auswirkungen auf die Langlebigkeit und Nachhaltigkeit des industriellen Wirtschaftens in
	Europa haben. Verstärkter Rohstoffeinsatz und zusätzlicher Energieverbrauch wäre die
	Folge und würde die europäischen Klimaschutzziele und Senkungsbestrebungen zum
	CO2 Ausstoß belasten.
	Der Zentralverband Oberflächentechnik e.V. kann auf Grund der oben angeführten
	Argumente die Aufnahme der Kobalt-Salze in den Anhang XIV der REACh-Verordnung
	nicht unterstützen.
	Im Falle einer Aufnahme der Stoffe Kobalt(II)-dinitrat, Kobalt-dichlorid, Kobalt(II)-sulfat,
	Kobalt(II)-diacetat, Kobalt(II)-carbonat in den Anhang XIV der REACh-Verordnung fordert
	der ZVO eine Ausnahmeregelung für die Verwendung von Kobaltsalzen in Lösungen zur
	Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei
L	



			galvanischen Korrosionsschutzsystemen. Die Problematik die wir speziell für uns sehen, liegt darin das momentan keine adäquaten Ersatzsystem auf dem Markt verfügbar sind. Weiterhin wird es sich ähnlich wie bei der Einführung des Chrom6-Verbots in der Europäischen Autoindustrie vor gut 10 Jahren zu einer Wettbewerbs Verzerrung kommen, da nicht europäische Lieferanten die nicht an das >EU- Recht gebunden sind, zu vergleichsweise niedrigeren Preisen liefern werden. Hintergrund ist hierbei das bereits bei der Umstellung auf die jetzt im Fokus stehenden Passivierungen die höheren Betriebskosten nicht an die Endabnehmer umgelegt werden konnten. Ergebnis war eine Preisdiskussion die auf dem Rücken und zu Lasten der Beschichter ausgetragen wurde.
1590	2011/09/14 14:52 File attached	Sønderborg Fornikling BehalfOfAnOrg anisation Company Denmark	Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung seite 7



1579	2011/09/14	Dr. Hesse	Wir halten die vorgeschlagene Priorisierung nicht für gerechtfertigt und fordern die Ablehnung
	14:47	GmbH & Cie.	einer Aufnahme von cobalt(II) dinitrate in den Anhang XIV.
		KG	Die Aufnahme von Stoffen in Anhang XIV erfolgt nach Artikel 58 REACH-Verordnung. Absatz 3
	File attached		des genannten Artikels definiert drei Kriterien für die prioritär aufzunehmenden Stoffe:
			(a) PBT or vPvB properties; or
		BehalfOfAnOrg	(b) wide dispersive use; or
		anisation	(c) high volumes.
		Company	Zu (a): PBT or vPvB properties
		Germany	cobalt(II) dinitrate hat weder PBT- noch vPvB-Eigenschaften.
			Zu (b): wide dispersive use
			Weiter treffen die von der ECHA aufgeführten Definitionen für einen "wide dispersive use" in
			keinster Weise auf die industrielle Anwendung von cobalt(II) dinitrate in Behandlungslösungen
			zur Erzeugung von Konversionsschichten zu.
			Es handelt sich um streng kontrollierte Anwendungen mit definierten Anforderungen an die
			Anlagentechnik, an die Ausbildung des Bedienungspersonals, an Sicherheitsvorkehrungen und
			persönliche Schutzausrüstung sowie an die Abluftbehandlung und Abwasserreinigung.
			Zudem entspricht die Anwendung im Bereich der Galvano- und Oberflächentechnik keiner der
			genannten Beispiele für "Wide-dispersive use refers to activities which deliver uncontrolled
			exposure: Painting with paints, spraying of pesticides, use of detergents, cosmetics,
			disinfectants, household paints".
			Klarzustellen ist hier weiterhin, dass in unserem Anwendungsbereich keine Weitergabe von
			cobalt(II) dinitrate an den Endverbraucher stattfindet.
			Co wird nicht in Form des Nitrates in die Konversionssschicht eingebaut, sondern als Mischoxid.
			Wir verweisen in diesem Zusammenhang auch auf den Verzicht der FDA zur Festlegung eines
			Grenzwertes für Cobalt für "dinnerware" wie im Annex XV report zu Cobalt(II) dinitrate unter
			1.2.2 aufgeführt.
			Eine Einstufung mit Release: 3 (diffuse / uncontrolled / significant) wie im "Draft background
			document for cobalt(II) dinitrate" ist für die Anwendung in der Oberflächentechnik also nicht
			zutreffend. Daher wäre eine Einstufung mit score=1 korrekt.
			Zu c) high volumes
			Die verwendete Menge cobalt(II) dinitrate in der Galvano- und Oberflächentechnik liegt in Europa
			signifikant unter 1000 t und entspricht damit nicht den Bedingungen für "high volumes"
			Bezüglich der von der ECHA ergänzten Bewertung nach "regulatory effectiveness" ist zu sagen,
			dass aufgrund der technischen Alternativlosigkeit (siehe Anhang) für die beschriebene
			Verwendung von cobalt(II) dinitrate keine Verbesserung für den Schutz der Umwelt und der



	<ul> <li>menschlichen Gesundheit erreichbar. Eine Zulassungspflicht durch Aufnahme in den Anhang XIV würde nur zu deutlich höheren Kosten und einer verminderten Wettbewerbsfähigkeit der Europäischen Unternehmen im globalen Wettbewerb führen.</li> <li>Insgesamt stellen wir fest, dass für die Verwendung von cobalt(II) dinitrate in der Oberflächentechnik weder das Kriterium "PBT or vPvB properties" noch das Kriterium "wide dispersive use" erfüllt ist und darüber hinaus eine "regulatory effectiveness" ebenfalls nicht gegeben ist. Auch sind die verwendeten Mengen in der Oberflächentechnik nicht in einer Größenordnung, die eine Priorisierung zur Authorisierung rechtfertigten.</li> <li>Die vorgeschlagene Priorisierung ist daher nicht gerechtfertigt und wir fordern die Ablehnung einer Aufnahme von cobalt(II) dinitrate in den Anhang XIV.</li> <li>Im – aus unserer Sicht nicht gerechtfertigten – Falle der Aufnahme von cobalt(II) dinitrate in den Anhang XIV der REACh-Verordnung fordern wir zumindest eine Ausnahmeregelung für die Verwendung von Co(II)-Salzen zum Zwecke der Erzeugung von Konversionsschichten auf Zink-und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen und verweisen dabei auf das ZVO-Papier (siehe Anhang):</li> <li>Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Co(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung im Zuge der public consultation bis zum 14.09.2011: Einsatz der zweiwertigen Kobaltsalze in Konversionsschichten in der europäischen Galvanotechnik</li> <li>zu diesem Thema, an dessen Erarbeitung wir beteiligt waren und das Arbeitsschutzaspekte, wirtschaftliche Bedeutung und die Bewertung von Alternativtechnologien ausführlich beleuchtet.</li> </ul>
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1568	2011/09/14 14:33 File attached	BehalfOfAnOrg anisation Company Germany	Kommentar des Zentralverbandes Oberflächentechnik e.V. (ZVO) zum Thema Vorschlag zur Priorisierung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate zur Aufnahme in den Anhang XIV der REACh Verordnung Seitenzahl 7
1560	2011/09/14 14:29 File attached	COVENTYA GmbH BehalfOfAnOrg anisation Company Germany	Die Verwendung von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)- acetate und Cobalt(II)-carbonate ist für die Herstellung unserer für die Oberflächenbehandlung relevanten Produkte unabdingbar. Die Ausführungen der Kommentierung des ZVO (siehe Anhang) stimmen voll und ganz mit den Argumenten und Forderungen der Coventya GmbH überein. Auf eine Auflistung wird hier verzichtet und wir verweisen auf die Kommentare des Zentralverbandes Oberflächentechnik e. V. (ZVO) "Einsatz der zweiwertigen Kobaltsalze in Konversionsschichten in der europäischen Galvanotechnik" und "Einsatz von Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate in Elektrolyten zur elektrochemischen Reduktion in der europäischen Galvanotechnik". Die Coventya GmbH kann auf Grund der in den Kommentaren aufgeführten Argumenten (siehe Anhang) die Aufnahme der Kobalt-Salze in den Anhang XIV der REACh-Verordnung nicht unterstützen. Im Falle einer Aufnahme der Stoffe Kobalt(II)-dinitrat, Kobalt-dichlorid, Kobalt(II)-sulfat, Kobalt(II)-diacetat, Kobalt(II)-carbonat in den Anhang XIV der REACh-Verordnung fordert die Coventya GmbH eine Ausnahmeregelung für die Verwendung von Kobaltsalzen in Lösungen zur Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen, eine Ausnahme von der Zulassungspflicht für die Verwendung von Kobaltsalzen (Cobalt(II)-sulphate, Cobalt(II)-dinitrate, Cobalt(II)-dichloride, Cobalt(II)-acetate und Cobalt(II)-carbonate) zum Zwecke der Erzeugung von kobalthaltigen metallischen Schichten bei der galvanischen Beschichtung und eine Ausnahmeregelung über die Verwendung für die Herstellung von Additiven/Präparaten für die Galvanotechnik.



			The use of Cobalt(II)-Sulphate, Cobalt(II)-Dinitrate, Cobalt(II)-Dichloride and Cobalt(II)-Acetate is essential for the manufacture of our products are relevant for the surface treatment. The remarks commenting on the ZVO (see Appendix) votes fully agree with the arguments and requirements of Coventya GmbH. On a collection is omitted here and we refer to the comments of the Central Association of Surface Treatment Professionals Germany (ZVO) "Application of divalent cobalt salts in Conversion layers in the European electroplating Industry" and "Application of divalent cobalt salts in cobalt and cobalt-alloy-layers in the European electroplating Industry". As described in the statements (see Appendix) Coventya GmbH cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)- acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations Coventya GmbH demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of functional, decorative and bright Cobalt-Alloy-Plating, the use of Cobalt(II)-Salts for the purpose of functional, decorative and bright Cobalt- and Cobalt- Alloy-Plating and an exception on the use for the manufacture of additives / supplements for electroplating.
1545	2011/09/14 14:20 File attached	Enthone GmbH BehalfOfAnOrg anisation Company United Kingdom	See attached



1515	2011/09/14	RECHARGE	Cobalt-based substances used in batteries.
	12:44	aisbl	RECHARGE confirms that cobalt (II) dinitrate is not present as active substance in batteries
			placed on the market (Nickel-Metal Hydride (Ni-MH), Nickel-Cadmium (Ni-Cd), Nickel-Zinc (Ni-
	File attached		Zn), Lithium-Ion (Li-Ion)).
		BehalfOfAnOrg	As mentioned in Tables 5 & amp; 6 of the proposals of The Netherlands the substance, cobalt (II)
		anisation	dinitrate is used as intermediate in preparation steps of active substances used in batteries.
		Industry or	Cobalt (II) dinitrate is not present in batteries commercially available to industrial or individual
		trade	users such as consumers.
		association	Cobalt (II) dinitrate is used as a precursor in the production of active substances placed in
		Belgium	batteries and is considered as an "intermediate" under the definition of REACH.
		Deigium	
			This substance is not present in the finished product (article) placed on the market. Therefore,
			there is no possibility of exposure of industrial and consumer battery users to Cobalt (II)
			dinitrate.
			The placing of this cobalt compound on the list of substances subject to Authorization (Annex
			XIV) is not justified for the battery industry for the following reasons:
			• As precursors to the production of active material in batteries, it meets the definition of
			intermediate under REACH,
			• It is not placed on the end user market,
			• Strict control of exposure is already in place at the various steps of cobalt (II) dinitrate
			use during the manufacture of active material for batteries both for the protection of the
			environment and human health.
			Conclusion.
			Therefore, we are inviting Competent Authorities and EChA not to place Cobalt (II) dinitrate on
			the list of substances subject to Authorization (Annex XIV).



1459	2011/09/14 11:06 File attached	Arnold Umfomtechnik GmbH&Co.KG Member of Würth Company BehalfOfAnOrg anisation Company Germany	We object recommendation to include the substance in Annex XIV and the prioritisation of the substance Availability of Alternatives o alternatives are still in development, but until now the altenatives do not reach the performance an process capability of cobalt containing zinc protection solutions . o the alternatives are much more expansive o there is a big gap in cost/performance ratio Assured handling in shop floor: o the assured handling at electroplating shops is achieved by providing and using personal protective equipment We refer to Comments by The Central Association of Surface Treatment Professionals Germany (ZVO) on the subject of Proposals for Prioritising Cobalt (II) Sulphate, Cobalt (II) Dinitrate, Cobalt (II) Dichloride and Cobalt (II) Acetate for Inclusion in Appendix XIV of the REACH Regulations.
1451	2011/09/14 10:51 File attached	A.M.P.E.R.E. DEUTSCHLAND GmbH BehalfOfAnOrg anisation Company Germany	The electroplating and surface treatment industry is, at the same time, both a key technology and a cross technology and, as a result, a driving force for technological advancement. In the field of electroplating, cobalt salts are used in particular in the manufacture of coatings made of metallic cobalt-alloys. Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent also a particular area of focus which is of growing importance. Cobalt- and cobalt-alloy-plating is a field of special interest whose importance continues to grow from both an economic and technical point of view. The added value gained from refining surfaces contributes to a strengthening of Europe as an economic region and secures the competitive edge of European products on the world's markets. To save resources and reduce CO 2 one has to have durable products with optimised technical properties. Zinc and zinc alloy coatings with the conversion layers deposited on them make a considerable contribution to achieving these aims as a result of their corrosion-protection properties. It can be generally said that zinc & zinc alloys provide optimum corrosion protection for a minimum use of materials and at low costs. The need to save resources necessitates the ability to produce durable commodities which have optimised technical properties. As a result of their mechanical properties, e.g. high hardness levels in gold application, cobalt including coatings makes a crucial contribution to these aims.



			The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. Further industries which are concerned are bathroom and furniture fittings, consumer articles, the watch and clockmaking and jewellery industries, medical technology and many other industrial fields in Europe will be referred to and the specific reasons explained as to why electrochemical cobalt- and cobalt-alloy-plating must remain an option in the future. Because of the following reasons we cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations.
1408	2011/09/14 09:21	Germany MemberState Germany	The German CA supports the ECHA proposal on prioritisation of cobalt(II) dinitrate due to its carcinogenic properties and toxicity for reproduction. Supplementary Notes: Verbal-argumentative approach, Scoring approach, page 5: Widespread uses are postulated although only medium number of sites is assumed. Site-# 2 corresponding to medium number of sites is not associated with widespread uses in case cobalt(II) carbonate. Adjusted wording is recommended for cases of medium number of industrial settings (Site-# 2). Conclusion, taking regulatory effectiveness considerations into account, page 5: We agree that all cobalt(II) compounds on the Candidate List should be treated equally with respect to prioritisation, because of the overall addition of divalent cobalt as the toxicologically relevant species from different cobalt(II) sources.



1392	2011/09/14 08:58 File attached Confidential	SurTec Deutschland GmbH BehalfOfAnOrg anisation Company Germany	We agree with the attached document: "Comments by The Central Association of Surface Treatment Professionals Germany (ZVO)on the subject of Proposals for Prioritising Cobalt (II) Sulphate, Cobalt (II) Dinitrate, Cobalt (II) Dichloride and Cobalt (II) Acetate for Inclusion in Appendix XIV of the REACH Regulations in connection with the public consultation up to 14 September 2011 Application of divalent cobalt salts in Conversion layers in the European electroplating Industry"
1229	2011/09/14 01:05 File attached	CETS aisbl BehalfOfAnOrg anisation Industry or trade association Germany	The aim of this report is to focus upon the shortcomings of the Annex XV dossier for the substancees cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate were part of the third priority list of existing substances under the legal framework of Regulation 793/93. The use of Cobalt(II) salts by the plating industry should be regarded as an intermediate in accordance with the definition of Article 3(15) of REACH. ECHA's interpretation of the concept of 'intermediate' (as given in its June 2010 clarification document) excludes substances used as surface treatments, e.g. Cobalt(II) salts used in metal finishing. However, the conclusion reached in the clarification document of June 2010 cannot be supported. The abovementioned clarification document was reviewed by two independent legal experts at the request of Industry. In Cefic's position paper of December 2010, the followed was reported: "Both legal advisory statements conclude that the interpretations for intermediates as elaborated in the [clarification] document go far beyond the Article 3 (15) of the REACH Regulation and therefore the concept of intermediates was narrowed tremendously by ECHA, Commission and the Member States." That position was subsequently endorsed by Cefic itself (see December 2010 document) and supported in a number of recent petitions made by Industry associations, such as AIAS and the Institute of Metal Finishing. In this connection, it is worthwhile noting at the outset that ECHA's guidance document for the preparation of an Annex XV dossier on the identification of substances of very high concern states in its point 3.3.4 that, "certain types of information, including exposure-related



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	<ul> <li>information, are needed for the later process used to prioritize the substances for inclusion on Annex XIV, once the dossier has been accepted." The guidance then continues to make reference to 'available' information on exposures.</li> <li>1. Occupational safety</li> <li>a. No risk in application of Cobalt(II) salts for the end-consumer or industrial client since only pure Cobalt metal is deposited on the substrate and there is no Cobalt(II) salt on top of the plated parts.</li> </ul>
	<ul> <li>b. Safe handling of the solutions to minimize the risk for the co-workers for dermal or respiratory tract absorption (as evidenced by of regular medical visits and vaccination of the co-workers involved).</li> <li>2. Alternative processes</li> </ul>
	There are a variety of familiar alternatives for Cobalt plating. These alternatives do not include one universal substitute process, capable of replacing Cobalt plating on a one to one basis (For details see attachment).
	3. Overall implications:
	a. The application of Cobalt plating shows a high socio-economic benefits due to the
	<ul><li>functional properties in a wide range of products (For details see attached document).</li><li>4. Summarized comments:</li></ul>
	Metallic layers with a cobalt or cobalt alloy surface are well established and widely used in the market place. The tendency in the electronic industry and other industrial sectors continues to
	emphasise the look and technical advantages cobalt or cobalt alloys while taking into account the existing quality standards.
	Long-term studies of the alternatives demonstrate the irreplaceability of cobalt or cobalt alloy surfaces made using electrolytes containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)- chloride, cobalt(II)-acetate and cobalt(II)-carbonate for most applications.
	The finish color, corrosion protection and solderability offered by layers made using cobalt or cobalt alloy electrolytes is noticeably poorer, which has a negative effect on the lifetime of the
	products to which the process is applied. This necessitates increased use of raw materials which is contrary to achieving sustainability targets set by European programmes.
	<ol> <li>Resulting requirements:</li> <li>According to the available data there is no basis for an inclusion of the Cobalt(II) salts in</li> </ol>
	Annex XIV of the REACh regulation.
	2. In the case of an inclusion it is absolutely necessary to realize a derogation rule for the application of Cobalt plating.



1210	2011/09/13 21:29 File attached	BehalfOfAnOrg anisation Company United Kingdom	Application of divalent cobalt salts in Conversion layers in the European electroplating Industry Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent a particular area of focus which is of growing importance. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars. Cr(III) based conversion coatings with high levels of corrosion protection are only possible if cobalt salts are added to the application solutions and cobalt is included in the conversion coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the conversion layer. The addition of cobalt salts is necessary in particular if corrosion protection is required in warm or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable up to now for zinc layers, zinc nickel and zinc iron alloys. Conclusions Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of



	coated steel components as used in all fields of industry, the trades and in households, and this
	protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion
	coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a
	valuable contribution to enabling resource-saving industrial and economic processes.
	There is little practical research available on the application of cobalt-free conversion coatings. In
	this context, comprehensive testing by electroplating firms is needed; optimisation and
	adjustment of applications need to be developed. In addition to this, it is necessary for end users
	to carry out function testing and day-to-day testing to determine and secure the properties of
	the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken
	into consideration. On the market you cannot find cobalt free conversion coatings with anything
	approaching the results from those which include cobalt.
	Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion
	protection of the parts so coated and that would have negative effects on the durability and
	sustainability of industrial efforts in Europe. The result would be increased consumption of
	resources and energy and this, in turn, would jeopardise the European targets for climate
	protection and efforts to reduce CO2 emissions.
	European manufacturers requiring the higher performance offered by cobalt conversion layers
	would simply arrange for coated articles to be imported from elsewhere thereby further
	jeopardising the already struggling surface treatment industry within the EU.
	MacDermid Scandinavia cannot therefore accept the arguments to include the Cobalt Salts
	(cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the
	Appendix XIV of the REACH regulations.
	In the event that these substances are included in Appendix XIV of the REACH regulations we
	request that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the
	purpose of creating conversion coatings in the fields of anti-corrosion zinc and zinc-alloy plating.
	purpose of creating conversion coatings in the fields of anti-corrosion zinc and zinc-alloy plating.
J	



1189	2011/09/13 19:54 File attached	verband der Automobilindus trie VDA BehalfOfAnOrg anisation Industry or trade association Germany	• It is difficult to see why the current justification and proportionality of the relevant provisions to handle Cobalt (II) dinitrate should need further approvals. National and European law already requires aspects of regulatory monitoring and control as well as to the increasing internationalization of requirements. Any additional configurable prioritization and approval of changes will only reproduce the current national requirements. see annex
1168	2011/09/13 19:12 File attached	BehalfOfAnOrg anisation Company United Kingdom	Application of divalent cobalt salts in Conversion layers in the European electroplating Industry Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent a particular area of focus which is of growing importance. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars. Cr(III) based conversion coatings with high levels of corrosion protection are only possible if cobalt salts are added to the application solutions and cobalt is included in the conversion coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the conversion layer. The addition of cobalt salts is necessary in particular if corrosion protection is required in warm or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable up to now for zinc layers, zinc nickel and zinc iron alloys. Conclusions



Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes. There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with anything approaching the results from those which include cobalt. Prohibiting the use of cobalt salts in conversion. Protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU. MacDermid Espanola S.A. cannot therefore accept the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations.



1162	2011/09/13		Application of divalent cobalt salts in Conversion layers in the European electroplating Industry
	18:59	BehalfOfAnOrg	Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion
		anisation	layers for the cathodic corrosion protection of steel components represent a particular area of
	File attached	Company	focus which is of growing importance.
		United	The use of cobalt (II) salts with its importance for the surface treatments industry, machine
		Kingdom	and plant engineering, automotive, improving the adhesion of paint layers when they are applied
			and other industrial sectors, such as the construction industry in Europe, must have a future in
			order to maintain the specific properties achieved with the application of electrochemical
			corrosion protection systems using zinc and zinc alloys with subsequent conversion layers.
			With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for
			the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars.
			Cr(III) based conversion coatings with high levels of corrosion protection are only possible if
			cobalt salts are added to the application solutions and cobalt is included in the conversion
			coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the
			conversion layer.
			The addition of cobalt salts is necessary in particular if corrosion protection is required in warm
			or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in
			housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable
			up to now for zinc layers, zinc nickel and zinc iron alloys.
			Conclusions
			Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of
			coated steel components as used in all fields of industry, the trades and in households, and this
			protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a
			valuable contribution to enabling resource-saving industrial and economic processes.
			There is little practical research available on the application of cobalt-free conversion coatings. In
			this context, comprehensive testing by electroplating firms is needed; optimisation and
			adjustment of applications need to be developed. In addition to this, it is necessary for end users
			to carry out function testing and day-to-day testing to determine and secure the properties of
			the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken
			into consideration. On the market you cannot find cobalt free conversion coatings with anything
			approaching the results from those which include cobalt.
			Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion
			protection of the parts so coated and that would have negative effects on the durability and



			sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU. MacDermid GmbH cannot therefore accept the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations we request that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of creating conversion coatings in the fields of anti-corrosion zinc and zinc-alloy plating.
1151	2011/09/13 18:41 File attached	BehalfOfAnOrg anisation Company United Kingdom	Application of divalent cobalt salts in Conversion layers in the European electroplating Industry Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent a particular area of focus which is of growing importance. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars. Cr(III) based conversion coatings with high levels of corrosion protection are only possible if cobalt salts are added to the application solutions and cobalt is included in the conversion coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the conversion layer. The addition of cobalt salts is necessary in particular if corrosion protection is required in warm or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable up to now for zinc layers, zinc nickel and zinc iron alloys. Conclusions



Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes. There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with anything approaching the results from those which include cobalt. Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU. MacDermid France cannot therefore accept the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included



1139	2011/09/13 18:32 File attached	Individual Italy	The use of Cobalt dinitrate in surface treatment doesn't meet the criteria of prioritisation. Very low exposition for automatic process. Cobalt dinitrate is used in the galvanic industry not as a substance but as a mixture. Environmental exposure controlled by regulation.
1138	2011/09/13 18:30 File attached	BehalfOfAnOrg anisation Company United Kingdom	Application of divalent cobalt salts in Conversion layers in the European electroplating Industry Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent a particular area of focus which is of growing importance. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars. Cr(III) based conversion coatings with high levels of corrosion protection are only possible if cobalt salts are added to the application solutions and cobalt is included in the conversion coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the conversion layer. The addition of cobalt salts is necessary in particular if corrosion protection is required in warm or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable up to now for zinc layers, zinc nickel and zinc iron alloys. Conclusions Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of



<ul> <li>coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 - 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes. There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with anything approaching the results from those which include cobalt.</li> <li>Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions.</li> <li>European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU.</li> <li>MacDermid Italiana cannot therefore accept the arguments to include the Cobalt Salts</li> </ul>
sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU.



1122	2011/09/13	Atotech	This Comment is provided on behalf of the following organizations:
	18:10	Deutschland	□ Atotech Deutschland GmbH
		GmbH	□ Atotech Österreich GmbH
			Atotech CZ, a.s., Česká Republika
			Atotech SK, s.r.o., Slovenská Republika
		BehalfOfAnOrg	□ Atotech France
		anisation	□ Atotech Italia S.r.l.
		Company	OOO Atotech-Chemeta, Lithuania
		Germany	□ Atotech Nederland B.V.
			Atotech Poland
			□ Atotech España S.A
			□ Atotech Skandinavien AB
			Atotech Slovenija, proizvodnja kemicnih izdelkov, d.d.
			□ Atotech UK Ltd.
			Comment on the applied approach of prioritization
			Article 58 paragraph 3 of the REACH regulation defines 3 criteria for the substances to be
			prioritized for inclusion in Annex XIV:
			(a) PBT or vPvB properties or
			(b) Wide dispersive use or
			(c) High volumes.
			To (a)
			None of the proposed Cobalt salts has PBT or vPvB properties.
			ECHA uses a scoring system for the determination of substances for prioritization of SVHC for
			inclusion in the List of Substances Subject for Authorization taking into account the
			aforementioned 3 criteria. The weighting of the single scoring results is as follows:
			- PBT or vPvB properties: 18%
			- Wide dispersive use: 41%
			- Volumes: 41%.
			There is no justification for this weighting based on the REACH regulation. Following ECHA's
			explanation for the weighting, the substances on the Candidate List are a defined as a selection
			of substances with very severe hazard properties. However the European Commission chose to
			highlight PBT and vPvB properties over e.g. CMR properties in the REACH regulation (e.g. Art.
			58, para. 3) as risks of first mentioned substances are deemed to be higher. Keeping this in mind
			the weighting should be equal throughout the 3 criteria as otherwise the hazard (PBT and vPvB)
			properties would be underestimated against the volume and the wide dispersive use.



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To (b)
The term 'wide-dispersive use' is explained in Chapter R.16.2.1.6 of the Guidance on
Information Requirements and Chemical Safety Assessment as follows: 'Wide-dispersive use
refers to many small point sources or diffuse release by for instance the public at large or
sources like traffic Wide-dispersive use can relate to both indoor and outdoor use'. In the
Technical Guidance Document for Risk Assessment of new and existing substances and biocides
(2003, Chapter 5) this term is defined as follows: 'Wide-dispersive use refers to activities which
deliver uncontrolled exposure. Examples relevant for occupational exposure: Painting with
paints; spraying of pesticides. Examples relevant for environmental/consumer exposure: Use of
detergents, cosmetics, disinfectants, household paints.' In addition, the ECETOC Report No. 93
on Targeted Risk Assessment (Appendix B) states: 'A substance marketed for wide-dispersive
use is likely to reach consumers, and it can be assumed that such a substance will be emitted
into the environment for 100% during or
after use.'
Definitions above do clearly not apply for the use of cobalt containing solutions in industrial
application. Such applications are strictly controlled equipment-technology-wise, personnel-
training-wise, safety-wise and personnel-safety wise respectively. Furthermore strict
requirements apply for waste water and exhaust air cleaning technology. Consequently the use is
absolutely not comparable with "sources like traffic", "painting with uncontrolled exposure" or
(outdoor) "spraying of pesticides".
In contrary to the definition of ECETOC Report No. 93 the substance never reach consumers and
exposure to environment is minimal as a result of aforementioned measures.
ECHA disregards the given definitions of wide dispersive use and postulates that this criterion can
be regarded as directly driven by the number of sites. ECHA defines already a number of 100
sites in Europe where cobalt salts are used as "high" (maximum scoring = 3). The "Guidance on Information Dequirements and Chamical Sofety Assessment" gives traffic as an even pla for
Information Requirements and Chemical Safety Assessment" gives traffic as an example for "many small point sources" with 240 million point sources in total.
For the scoring the "number of sites" is multiplied by "Release". Here an inconsistency is present
in the evaluation of the use of cobalt(II)sulphate in industrial surface treatment:
<ul> <li>It is noted that the number of sites of use is unknown, however rated as "high".</li> </ul>
<ul> <li>It is noted that the number of sites of use is unknown, nowever fated as fight.</li> <li>It is stated that "Releases and exposure to workers might be controlled in most instances,</li> </ul>
however some of the uses appear to have a potential for significant worker exposure".
Consequently the majority of uses is controlled and should be rated accordingly (score `1').
Assuming that few cases have a potential for high exposure does not justify the classification as
"wide-dispersive use", which would base on a high number of point sources with uncontrolled





1118	2011/09/13 18:08	Central Association of	The Central Association of Surface Treatment Professionals Germany (ZVO) herewith comments Application of divalent cobalt salts in cobalt or cobalt alloy layers in the European electroplating
	10.00	Surface	Industry:
	File attached	Treatment	In the following the summarizing arguments and comments will be presented. For the detailed
		Professionals	statements we do refer to the uploaded document.
		Germany	The comments are also valid for the other Cobalt Compounds.
		(ZVO)	
			Cobalt (II) Sulphate, Cobalt (II) Dinitrate, Cobalt (II) Dichloride, Cobalt (II) Acetate and Cobalt
		BehalfOfAnOrg	(II) Carbonate
		anisation Industry or	<ul> <li>a. Electrohemical processes for generating Cobalt and/or Cobalt-Alloy layers based on Cobalt compounds</li> </ul>
		trade	<ul> <li>These processes involve immersing the components to be coated in an aqueous cobalt</li> </ul>
		association	salt solution. Metallic cobalt is deposited by the process of electrochemical reduction as metal
		Germany	themselves or in cobalt-alloys.
			- Cobalt and cobalt-alloy plating is considered to be the most desirable final finish for a
			majority of electroplated consumer goods and electronic equipment. Other surfaces cannot
			provide the same levels of quality and economy
			- The addition of cobalt-salts is necessary in particular if hardness is required in Gold alloy
			depsosits.
			- The result of this coating process is that the final surface of the component contains only
			metallic cobalt, which is a completely harmless substance from a consumer viewpoint. b. Potential health hazards
			- There are no figures available for absorption of soluble cobalt salts through the skin, but a
			sensitising effect on the skin is believed to exist.
			- No figures on acute inhalation toxicity of soluble cobalt compounds are available. However,
			two-year tests on rats indicate that there may be a hazard of chronic toxicity including damage
			to the respiratory tract.
			- Health hazards through unintentional oral intake of soluble cobalt salts do not exist. Wherever
			cobalt salts or compounds containing cobalt salts are handled, there are strict prohibitions in
			force to prevent eating, drinking and smoking. Unintentional intake can, therefore, be
			discounted.
			- Sensitisation of the skin can also be excluded. Sufficient protection exists by applying personal
			protective equipment (PPE). Employers are required to monitor the compliance of staff with the
			prescribed use of PPE.



- If existing safety regulations are not adhered to, there are potential health hazards in handling cobalt (II) salts in day-to-day production environments, which is why workers must be subjected
to regular health checks in order to detect any possible health damage at an early stage. It is important to note that, in coatings firms, only fluid mixtures are used for generating cobalt gold alloy layers.
<ul> <li>Preventative health checks are required for workers who may be at risk from inhalation of cobalt compounds in the shape of respirable dust or aerosols or who may have skin contact.</li> <li>To protect its workers, companies are required to take suitable measurements in the workplace to determine the extent of any effects of cobalt compounds and, in this way, to monitor the long-term effectiveness of the protective measures implemented – e.g. the efficiency of air extractors.</li> <li>The employer is required to commission an approved doctor to carry out the preventative examinations. The requirement for an "approved" doctor is to ensure that he/she has</li> </ul>
the necessary technical knowledge, understands the technical equipment and work environment and is able to implement the regulations as required.
<ul> <li>c. Environmental protection when dealing with conversion layers</li> <li>Solutions containing cobalt for generating cobalt or cobalt alloy layers require electricity. The application usually takes place at temperatures between 25 and 40°C. Where appropriate technical equipment has been installed on site, such as an air extractor, this manufacturing process does not generate any hazardous aerosols and the air in the workplace will not be contaminated in fact,</li> </ul>
- Cobalt is found in aqueous solutions as a cation. By adjusting the pH value to the alkaline range, the cobalt can be precipitated out as cobalt hydroxide at < 1 mg/L. There is currently no limit value in the German Waste Water Regulations for electroplating firms or in Appendix 40 to the regulations.
d. Economic importance of electrochemical cobalt plating Cobalt and cobalt-alloy plating is considered to be the most desirable final finish for a majority of electroplated consumer goods and electronic equipment. Other surfaces cannot provide the same levels of quality and economy. The economic advantage is in the attractive appearance of the surface and the high degree of hardness in different alloys, chemical resistance and toxicological harmlessness, achieved with very little effort. Products plated in this way can be expected to have a long service lifetime. To cite just one example, consider the decorative cobalt-tin or cobalt-gold alloy plating of taps and fittings in sanitary installations. Even where they are subjected to tough professional use and cleaned with abrasive cleaners, these cobalt included
surfaces will provide decades of protection on high-grade taps and similar parts. The technical and decorative cobalt alloy surface is thus a contribution to careful use of natural resources.



			<ul> <li>e. Resulting Requirments</li> <li>&gt; As described in the statements above the Central Association of Surface Treatment</li> <li>Professionals Germany (ZVO) cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations.</li> <li>&gt; In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative and bright Cobalt-Alloy-Plating.</li> </ul>
1103	2011/09/13 17:58 File attached	BehalfOfAnOrg anisation Company United Kingdom	Application of divalent cobalt salts in Conversion layers in the European electroplating Industry Within the overall field of electroplating, zinc and zinc alloys and their subsequent conversion layers for the cathodic corrosion protection of steel components represent a particular area of focus which is of growing importance. The use of cobalt (II) salts with its importance for the surface treatments industry, machine and plant engineering, automotive, improving the adhesion of paint layers when they are applied and other industrial sectors, such as the construction industry in Europe, must have a future in order to maintain the specific properties achieved with the application of electrochemical corrosion protection systems using zinc and zinc alloys with subsequent conversion layers. With effect from 1 July 2007, only trivalent conversion coatings were permitted to be used for the aftertreatment of galvanized / zinc alloy coated components for new registrations of standard cars. Cr(III) based conversion coatings with high levels of corrosion protection are only possible if cobalt salts are added to the application solutions and cobalt is included in the conversion coatings as a hydroxide (damp) and oxide (dry) in proportions of < 2% with reference to the conversion layer. The addition of cobalt salts is necessary in particular if corrosion protection is required in warm or hot environments (e.g. engine spaces, brakes, gearboxes etc. and in electrical parts in housings etc.). In these cases, solutions containing cobalt are state-of-the-art and indispensable up to now for zinc layers, zinc nickel and zinc iron alloys. Conclusions Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of



	coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes. There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with anything approaching the results from those which include cobalt. Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. European manufacturers requiring the higher performance offered by cobalt conversion layers would simply arrange for coated articles to be imported from elsewhere thereby further jeopardising the already struggling surface treatment industry within the EU. MacDermid plc cannot therefore accept the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride and cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations we request that there has to be an exception to the rules



1061	2011/09/13	Agoria	The prioritization of the different cobalt salts does not seem appropriate for Agoria. The
	16:59		classification makes these substances surely eligible to be prioritized but there are serious doubts
		BehalfOfAnOrg	on the claimed widespread use of cobalt dichloride as well as on the lack of clear exposure which has an impact on the prioritization. Agoria does not believe that these cobalt salts should be
		anisation	prioritized at this stage.
		Industry or	The reported quantity for the different cobalt salts in the Annex XV dossier, are not reflecting the
		trade	actual reality within the EU. In global the actual use is significantly less than the volume
		association	mentioned in the Annex XIV files. On top of this between 90 to 99% of the use is an intermediate
		Belgium	use which is exempted from the authorization procedure. (cobalt sulphate >97%, cobalt
			diacetate > 90%, cobalt carbonate > 94%, cobalt dinitrate > 99% and cobalt dichloride
			> 99%) This means that the volume of cobalt dichloride in the scope of the authorization
			procedure is negligible according to our estimations.
			The exposure to cobalt salts is furthermore well controlled as is documented by the Chemical Safety report submitted for the REACH registration for these cobalt salts. The CSR includes an
			exposure scenario for each identified and reported use and each of these exposure scenario
			resulted in a risk characterization ratio below 1. This means that all identified uses of cobalt salts
			within the EU are well controlled.
			Cobalt salts are also already controlled by different existing legislations to protect human health
			as well as the environment. The carcinogen at work directive (2004/37/EC) imposes the need for
			a risk management at the work place including the taking of the necessary risk management
			options. Also the IPPC directive (2008/1/EC) is providing the framework for limiting the impact
			on the environment. The general restriction of the supply of CMR's for supply to the general
			public is also limiting the consumer exposure. (REACH) On the potential substitution there is a general misconception regarding interchangeability.
			Cobalt salts cannot be substituted by other cobalt salts in most of the applications. In nearly all
			cases this is neither technical nor economically feasible to implement such a substitution. In this
			respect we are not supporting at all the grouping of all cobalt salts to be prioritized which is
			according to our information done out of 'fear' of this NON-existing potential for substitution.
			The socio-economic impact of the authorization is clearly underestimated according to Agoria.
			First of all, we are confused of the diverging signals given, taken into account that cobalt was
			identified as a critical raw material within the Raw Materials Initiative of the European
			Commission linked to the economic importance in different future technologies such as batteries,
			combating air pollution. In this report the substitution potential is described as: "Substitutes for cobalt are constantly being sought mainly because of the metal price volatility. However, due to
			the unique properties of cobalt, there are limited options for substitution and almost all
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			<ul> <li>substitutes result in reduced product performance." This seems a conflicting signal with this proposal to prioritize cobalt salts for authorization and thus affecting even further the long term availability for cobalt salts.</li> <li>The different cobalt salts are used in a broad range of applications the following sectors: <ul> <li>The use as catalysts in the oil refining, synthetic fibres, plastics, desulphurised fuels, oxidation catalyst for the car industry, esterfication,</li> <li>Hardmetals</li> <li>Rechargeable batteries for industrial applications, hybrid cars, computers, power tools, phones,</li> <li>Electroplating such as anodizing, wear resistance, electronics, corrosion resistance,</li> <li>Other applications such as animal feed, ceramics, tyres, inks/dyes, paint driers, pigments, biotechnology.</li> </ul> </li> <li>Several of these applications, in which cobalt salts are used, in general as an intermediate, contribute strongly to the evolution to a more sustainable society. Finding alternatives is not that easy given the broad applications, the technical and economic challenges linked to substitution. The cobalt salts are not found in the final product given that it is mostly used as an indispensable intermediate within the value chain. This means also that exposure to the end-consumer can be exempted.</li> </ul>
989	2011/09/13 14:59 File attached	BehalfOfAnOrg anisation Company Germany	Our company cannot follow the arguments to assume the cobalt-salts into the appendix XIV of the REACH regulations. According to this, we agree with the former statement of the Central Association of Surface Treatment Professionals Germany (ZVO). Link : http://www.zvo.org/uploads/media/Kommentierung_ZVO_Cobaltsalze_galvanisch_V20110911_E NGLISCH.pdf Another aspect is the global market. The ban of cobalt-salts would weaken the euroean industry, especially the export-oriented mechanical engineering. After the real-estate crisis 2007-2010 and the Euro-crisis, started in 2011, another self-made mechanical-engineering-crisis would damage Europe. As small company of craftsmanship, we estimate, that our company is going to loose up to 50% of the workplaces if cobalt-salts were assumed into the appendix XIV of the REACH regulations.



976	2011/09/13 14:43	Sweden MemberState Sweden	We support the prioritisation of cobalt dinitrite for inclusion in Annex XIV. Based on the criteria, the substance has moderate priority, but as cobalt salts may be replaced by other cobalt salts with the same hazard profile, a grouping approach is warranted.
973	2011/09/13 14:40 File attached	BehalfOfAnOrg anisation Industry or trade association Germany	Cathodic corrosion protection using zinc and zinc alloys is an indispensable characteristic of coated steel components as used in all fields of industry, the trades and in households, and this protection is reinforced and maintained by conversion layers. Electrochemical anti-corrosion coatings extend the lifetime of steel parts by a factor of 20 – 100 and, as a result, make a valuable contribution to enabling resource-saving industrial and economic processes. There is little practical research available on the application of cobalt-free conversion coatings. In this context, comprehensive testing by electroplating firms is needed; optimisation and adjustment of applications need to be developed. In addition to this, it is necessary for end users to carry out function testing and day-to-day testing to determine and secure the properties of the coatings in realistic conditions. In many contexts, there are also safety aspects to be taken into consideration. On the market you cannot find cobalt free conversion coatings with nearly the same results than including cobalt. Prohibiting the use of cobalt salts in conversion coatings would considerably reduce the corrosion protection of the parts so coated and that would have negative effects on the durability and sustainability of industrial efforts in Europe. The result would be increased consumption of resources and energy and this, in turn, would jeopardise the European targets for climate protection and efforts to reduce CO2 emissions. As described in the attached statements above the German Fasteners Association (DSV) cannot follow the arguments to include the Cobalt Salts (cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-acetate) into the Appendix XIV of the REACH regulations. In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the



			purpose of anti-corrosion, decorative and bright Cobalt-Alloy- Plating. Attached documents we would like to refer to: Central Association of Surface Treatment Professionals Germany (ZVO) "Application of divalent cobalt salts in Conversion layers in the European electroplating Industry"
966	2011/09/13 14:30 File attached	EUROBAT BehalfOfAnOrg anisation Industry or trade association Belgium	Most Cobalt salts already have to be sourced outside of the European Union either directly or in mixtures. The battery industry believes that adding Cobalt (II) dinitrate and Cobalt (II) sulphate to Annex XIV of the REACH Regulation will produce adverse effects on the EU-based production of the mixtures it uses for the production of batteries. We believe it is critical for the security of supply of the European battery industry to ensure that production capacity of the substances we use remains operational in Europe. An authorisation requirement for these substances will not prevent their use, as it is our understanding that they are widely used as intermediates in various industries as is the case in the battery industry, but will surely hamper the production of mixtures in the EU. We therefore recommend that Cobalt (II) dinitrate and Cobalt (II) sulphate should not be included under Annex XIV of the REACH Regulation.



961	2011/09/13 14:25	United Kingdom MemberState United Kingdom	Based on the prioritisation criteria and the possibility of significant workplace exposure we agree with the proposal to recommend the following substances for inclusion in Annex XIV. Cobalt (II) Sulphate Cobalt (II) diacetate However, whilst we agree that grouping certain compounds, such as transition metal salts, together is a sensible approach, there should be evidence to support their interchangability. In the case of the following cobalt compounds we are not sure that this is the case and this warrants further investigation before these substances, which only score moderately according to the prioritisation criteria, are recommended for inclusion in Annex XIV. Cobalt (II) dinitrate Cobalt (II) Carbonate Cobalt dichloride
925	2011/09/13 13:09	Dr. Kubitz GmbH BehalfOfAnOrg anisation Company Germany	Cobalt sulfate solutions with additions of phosphorus are being used as electrolyte for the deposition of cobalt phosphorus coatings. These serve after coding as scale in automatic angular or distance measuring e.g. in the machine tool industry. Their advantage over all competing systems is robustness against dirt and adverse environmental conditions and their modest requirements for space. They are contained in some of the products of at least one of the largest ball bearing manufacturers (who however might not be aware of this fact)



887	2011/09/13 11:43	European Aviation Safety Agency BehalfOfAnOrg anisation European Institution Germany	
843	2011/09/12 19:09 File attached	LKS Kronenberger GmbH Metallveredlun gswerk BehalfOfAnOrg anisation Company Germany	LKS Kronenberger GmbH Metallveredlung will give the same comments to Cobalt(II)-Dinitrate like done by Cobalt(II)-Chlorid. To avoid repeating the same arguments many times please see our comments on Cobalt(II)-Chlorid made at the same day !



837	2011/09/12 18:20 File attached	EDF SA BehalfOfAnOrg anisation Industry or trade association France	
792	2011/09/12 15:59	BehalfOfAnOrg anisation Company United Kingdom	Our company provides comments as EU producer of Cobalt dinitrate. Our company is member of the Cobalt REACh Consortium and as such, participated to its mapping exercise and provided information on tonnages, manufacture, uses and releases; aggregated results from this exercise are available from the Consortium and in the REACh registration dossier. Volume(s) imports/exports (section 2.1.1. – page 1): According to our records, the volume manufactured in the EU is in the 1000 – 10000t/y. Manufacture and releases from manufacture (section 2.2.2.1. – page 2): We do not think that exposure data are relevant to the current EU manufacturing releases as stated. First study is out of the EU, therefore should not be considered. On top of that, results are not specific to Cobalt dinitrate. Second study appears to be a little old, therefore not representative of current practice. Updated exposure data from manufacture have been provided in REACh registration dossiers (prepared by Cobalt REACh Consortium) and can be used as reference. Uses and releases from uses (section 2.2.2.2. – pages 2 to 4): We confirm the following uses on customers' and internal information: • Use as intermediate to manufacture other chemicals – exempt from Authorisation: This is the major use (97%). This includes the manufacture of other cobalt compounds (salts and carboxylates), the manufacture of active substances for production of batteries, and the manufacture of catalyst. • Use in surface treatments applications: This includes plating and passivations applications. • Use in oxygen scavenger applications.



<ul> <li>We do not think that the exposure data provided in background documentation are relevant: they are not specific to Cobalt dinitrate and some are old data from 1994 which we consider not up-to-date.</li> <li>Updated exposure data from uses have been provided in REACh registration dossiers (prepared by Cobalt REACh Consortium) and can be used as reference.</li> <li>Main hazard identified is via inhalation. Part of Cobalt dinitrate is produced and sold as solution in water; in this case, there is no risk of exposure in good handling practices. On top of that, Cobalt dinitrate in solid form is a damp crystal, therefore the inhalation risk is negligible.</li> <li>Availability of information on alternatives (section 2.3 page 4):</li> <li>The majority of our customers confirmed that the uses of Cobalt dinitrate are specific and no alternative is available including the substitution by any other Cobalt salt.</li> <li>Existing specific Community Legislation relevant for possible exemption (section 2.4 page 7):</li> <li>As per REACh legislation (Title 1 - Article 2 - 8b), intermediate uses are exempted from Authorisation. The vast majority of suse (97%) is as intermediate uses are exempted from Authorisation. The vast majority of uses (97%) is as intermediate uses and exempted from Authorisation.</li> <li>On top of that, CMR compounds are already covered by other legislations including: the Carcinogens Directive (90/394/EEC), Directive 98/24/CE, Directive 2004/37/EC and IPPC directive (Dir. 2008/1/EC) cover already risk management of carcinogens at work.</li> <li>Global comments on prioritization (section 3.1 page 5):</li> <li>Based on information gathered, we do not think that Cobalt dinitrate should be placed on Annex XIV. Reasons are the followings:</li> <li>Uses are mainly intermediate uses and as such exempted from Authorisation,</li> <li>For risk management, uses not exempted from Authorisation are already covered by other legislations;</li> <li>Mew data available tend to show a carcinogen thresho</li></ul>



791	2011/09/12	SAFT	INTRODUCTION:
	15:58		Saft is an active member of the Cobalt REACH Consortium Ltd (CoRC). We participated to the
			Joint Response Comments submitted on 30 August 2011.
		BehalfOfAnOrg	USES IN BATTERIES:
		anisation	Cobalt dinitrate is used to manufacture active substances for batteries. In this use, cobalt
		Company	dinitrate is further transformed to be incorporated into battery electrodes.
		France	Use of cobalt dinitrate for the manufacture of active substance for the production of batteries
			ALWAYS HOLDS INTERMEDIATE STATUS.
			This use concerns Li-ion, alkaline rechargeable (such as industrial Ni-Cd) batteries and Ni-MH
			batteries (used in HEV and EV vehicles) which are used in storage applications (for intermittent
			renewable energy generation in photovoltaic and wind).
			GEOGRAPHICAL DISTRIBUTION:
			Only two sites in the E.U. are using cobalt dinitrate (intermediate status) in the course of active
			material production for battery electrodes.
			AVAILABILITY OF INFORMATION ON ALTERNATIVES:
			It is not necessary to comment on alternatives for this use that is OUTSIDE THE SCOPE OF
			AUTHORISATION (INTERMEDIATE USE).
			PRIORITISATION:
			The use of cobalt dinitrate at these sites would be controlled under various pieces of existing
			legislation and has been shown in the CSR to have RCR below 1. We therefore disagree with the
			score of 3 regarding the "release" status in the "wide dispersiveness" column of the table in
			section 3.1. The appropriate release score for this use should therefore be 2.
			ECHA states the cobalt nitrate is of moderate priority but should be placed on Annex XIV as there are other cobalt compounds that could replace it. We agree with the conclusion that cobalt
			nitrate is of moderate priority, we further believe that a lower score should be assigned for the
			reason explained above and we disagree with the statement that other cobalt compounds can
			replace cobalt nitrate in its uses.
			Therefore established facts do not lead to the proposal that cobalt nitrate should be prioritized
			for inclusion on Annex XIV. Putting cobalt dinitrate through Authorisation would have an
			imperceptible effect in safety/exposure as:
			- this is an INTERMEDIATE (it is not present in the battery)
			- the substance is already controlled under existing legislation,
			- there is no consumer exposure.



742	2011/09/12 11:17	BehalfOfAnOrg anisation Company Germany	Cobalt containing passivations are right now widely used to improve corrosion protection of zinc and zinc-alloy plated parts. Cobalt free passivations with similar of even improved corrosion protection are available and are also already used, so in our point of view there is no need for cobalt salts in the use of passivations.
741	2011/09/12 11:16	BehalfOfAnOrg anisation Company France	The use of cobalt(II)dinitrate in surface treatment doesn't meet the criteria of priorisation



717	2011/09/10 12:00 File attached	Adolf Krämer Metallveredlun g GmbH & Co KG BehalfOfAnOrg anisation Company Germany	We made surface technologie for automotive, windcraft, solar and so on. For high corrosion resistance in off shore or winter geographic lands we need Cobalt for the corrosion resistance. Without cobalt and Cr-VI you 've got a ressistance from minus 90%! For us means we lost round about 70 peoples and 8 Mio € turn around.
685	2011/09/09 14:37 File attached	BehalfOfAnOrg anisation Company Germany	The criteria for prioritization of substances for inclusion into Annex XIV are listed in Art. 58 (3): a) PBT or vPvB properties, or b) wide dispersive use, or c) high volumes. None of these criteria applies to cobalt dinitrate. As mentioned in the background document, the volume of cobalt dinitrate regulated by the authorization in the EU is quite low and the uses of the substance are not considered as wide dispersive. Nevertheless, we understand the need for the authorization of cobalt dinitrate (regulatory effectiveness) to prevent the switch from other cobalt salts, which are fulfilling the criteria of Art. 58 (3), to cobalt dinitrate for some uses. However, this should not lead to authorization for uses of cobalt dinitrate which are not related to this regulatory effectiveness and which would not have been in focus of authorization based solely on the criteria of Art. 58 (3).



677	2011/09/09 13:08	Hach Lange GmbH BehalfOfAnOrg anisation Company Germany	Cobalt(II) dinitrate is a compound that is used in laboratory analysis for different reaction. The reagent is used for laboratory and field analysis, and ready for use. The advantage of the reagent set is, that the risk of contamination by the noxious substances, is low for the user. It is effectively a closed system. Accordingly, the risk of coming into contact with the reagent is very low. Compared with the conventional reference procedures, the regents set needs less pollutants, and a correspondingly smaller quantity of Cobalt(II) dinitrate. Therefore, it is essential to exempt the use of Cobalt(II) dinitrate for "analysis purposes" respective "laboratory uses" from the requirement for approval, or it should be classified as an approved use.
674	2011/09/09 12:47	Assogalvanica BehalfOfAnOrg anisation Industry or trade association Italy	The factor calculated (high: 9-10) is considered to be disproportionate. In particular, the value for substance dispersion (environment, workplace and end-users) (3) appears excessive. Since the use of dangerous chemicals is regulated and subject to the control of chemical risk (for example in Italy, Legislative Decree 81/08) a score of 1 is proposed. Referring to the galvanic industry, the risk of exposure to cobalt dinitrate is not significant because of the extremely small quantities used. Consequently, the proposed new priority value for the substance is: Inherent properties (IP) 0-1 0= CMR with effect threshold 1= CMR without effect threshold Volume (V) 3 Relatively Low: 10-100 t/y Uses: wide dispersiveness (WDU): 2*1=2 Site# 2 medium Release 1 Non-diffuse/controlled Total value: TOT = (IP) + (V) + (WDU) = (0-1) + (3) + (2) = 5-6



642	2011/09/08	Xstrata	Cobalt Dinitrate
	18:34	Nikkelverk AS	We have serious concerns that the quality of the data in the supporting documents is insufficient
			for a valid Prioritisation of cobalt dinitrate. It is flawed and misleading in many key respects. This
			important decision must be based on facts, and not speculation, to protect the integrity of the
		BehalfOfAnOrg	REACH process. We respectfully request that ECHA and the Member State representatives take
		anisation	the necessary time to correct the quality of the data in the supporting documents in all the key
		Company	areas BEFORE any Prioritisation evaluation of the five cobalt compounds is attempted, in order to
		Norway	avoid unnecessary economic hardship to the European cobalt chemical industry and its
			downstream users.
			Our concerns are detailed as follows: 1. Ranking process - We are concerned that there has been a significant over-estimate of
			1. Ranking process - We are concerned that there has been a significant over-estimate of the risks posed by this substance in the ranking process. This appears to have been the result of
			a lack of detailed understanding of these substances in all the key ranking criteria. From work
			commissioned by the Cobalt REACH Consortium, the following elements of the ranking process
			criteria should be urgently reviewed before any decision is taken to place cobalt dinitrate on
			Annex XIV:
			a. Tonnage – REACH registration tonnage bands have been used to estimate tonnage
			produced / used. This approach guarantees an overestimate of the tonnage in question because
			of the use of the upper end of the range in the ranking process, and also because it will ignore production volumes destined for export, which are within the scope or REACH registration, but
			outside the scope of Authorisation. It is our understanding from a survey recently
			commissioned by the Cobalt REACH Consortium that the EU/EEA tonnage of this substance,
			adjusted for exports is only one tenth of the 10,000 mt p.a. upper end of the range used in the
			ranking, and is estimated to be between 100 and 1,000 mt p.a. This is stated in the supporting
			document, but is it reflected in the volume criterion ranking ? Furthermore, when uses are
			considered, only between 0 and 10% of this reduced tonnage is within the scope of
			Authorisation.
			b. Uses – Many of the uses listed in the document are not specific to cobalt dinitrate, and
			relate to applications of other cobalt chemicals, and even cobalt metal and alloys
			(welding/soldering). This is misleading, especially where these uses are then stated to be
			related to high exposures and wide dispersive use. These statements are then inappropriately
			reflected in the ranking score for these criteria. Only uses of the compound in question should
			be considered in the Prioritisation process in line with the legislation. The current, most recent Cobalt REACH Consortium survey reveals the following end use split for
			cobalt dinitrate:
L	1	1	



	- 90% to manufacture other chemicals (includes 35% as catalysts, 20% as pigments, and
	5% as batteries) intermediate status
	- 10% for use in surface finishing, where responses indicated "intermediate status".
	There are no identified 'professional uses' of cobalt dinitrate with its attendance concerns for high
	exposure and wide dispersive use.
	It is critical for the integrity of the Prioritisation process that assumptions used for value
	judgments on wide dispersive use, non-intermediate status, etc. in the supporting document
	MUST be based on data, and not the absence of data, as seems to be the case here.
	c. 'Intermediate status' – From the Cobalt REACH consortium survey, approximately 90% of
	uses (above) meet the guideline definition of intermediate status, and so are exempt from
	Authorisation. In the case of catalysts, cobalt carbonate is a raw material in a multi-step process
	in the manufacture of catalysts, and their intermediate status is not in question. There is no
	cobalt dinitrate in the finished catalyst.
	We understand that a number of responses to the recent Cobalt REACH consortium survey
	indicated that the cobalt nitrate was used as intermediates. We recommend further study is
	needed as to the precise use of cobalt nitrate in surface finishing applications to confirm the
	intermediate status if there is still concern on this point. It is not appropriate to assume that all
	applications within surface finishing are non-intermediate status without this understanding.
	d. Wide dispersive use – the quantification of the 'wide dispersive use' has been impacted by
	inappropriate assumptions on the uses of cobalt dinitrate, and should be adjusted for the actual
	applications shown above. We assume some of the concern about wide dispersive use arises
	from the use in surface finishing. This industry is often characterized by a large number of small
	operations. However, this needs to be investigated further for cobalt nitrate, as the use of cobalt
	compounds in surface finishing is not widespread, in part due to their cost compared to other,
	much cheaper alternatives that may do a similar job. This ranking needs to be reviewed in the
	specific context of cobalt nitrate and not the generic view of the surface finishing industry. In
	any case, the tonnage involved is small. If there remain concerns following further study,
	Restriction, rather than Authorisation would be a more effective regulatory control for the specific
	surface finishing applications of concern.
	e. Interchangeability / Substitutabilty - It is our understanding that it is not possible to
	substitute cobalt nitrate by the other cobalt compounds for these applications. To make any
	process change, even if chemically possible, would involve extensive development costs and changes to the flow diagram of the entire process. The cost of such changes would not be



economic, and so means that the substances would not be interchangeable in any practical sense. We understand interchangeability is a core assumption to 'grouping' the five cobalt substance, and we recommend that this be reconsidered in the light of this information.
<ol> <li>Lack of good data - The lack of detailed information in the documentation is exemplified by the widespread use of "appear to be", "seem to be", etc. prefacing the key statements about tonnages, uses, and what is in, and what is out, of the scope of Authorisation. Given the very significant economic impact on companies and employees of a decision to place substances on Annex XIV, we would strongly recommend that more time is taken to improve the quality of the data used to make the Prioritisation determination for this substance, particularly at this time of economic hardship across Europe. This important decision must be based on facts and not speculation.</li> <li>Exposure data – We understand that much of the exposure data used in the background document dates from 1994, and is not specific to cobalt nitrate. The REACH registrations for these substances contain a wealth of data about exposure scenarios, and risk characterisation.</li> </ol>
Prioritisation of this substance without considering the REACH data available as the basis of the supporting document. We do not understand why this has not been done.
4. Regulatory efficiency – Given that the majority all uses of cobalt dinitrate are exempt from, or outside the scope of, Authorisation, that all applications are in an industrial setting
covered by existing workplace regulation, that there is therefore no consumer exposure issue, and that interchangeability is not technically or economically possible, there is no environmental or health benefit to be realized by placing cobalt carbonate on Annex XIV that we can identify.
We are concerned that the credibility of the REACH and Authorisation process could be put at risk by decisions taken on incomplete and, in some cases, misleading information. Political expediency is no substitute for good, data based, decision making particularly where people's
livelihood is at risk. 5. Economic impact - The cobalt industry is small but significant in value terms for Europe.
Cobalt dinitrate, as are the other cobalt compounds subject to this review, is a critical raw material that is the starting point for a range of downstream industries that are crucial to many
other EU initiatives, such as clean air and energy and resource efficiency, to say nothing about the economic added value for the European economy. Catalysts produced from these substances
are essential to the economy of European chemical manufacturing industry, enabling reactions to take place at low temperatures, low pressures, with wider benefits for energy and resource efficiency. Desulphurized fossil fuels are just one of the resulting products that are vital to



Europe's efforts to improve the health of the population by producing clean air. All engineering companies in Europe rely on cutting tools that have employed the use of one or more of these compounds at an early stage of their manufacture. Modern electronic devices such as computers, mobile phones, and hybrid cars use rechargeable batteries, the latest generations of which use components which used at least one of these cobalt compounds in an early stage in their manufacture. Meanwhile, Cobalt has been designated a 'critical raw material' by the European Commission. There has been no impact assessment for the effect on industry or these other cornerstone EC policies as part of this Prioritisation. These products are so fundamental to our daily lives that they will continue to be produced. These downstream products will still be imported into Europe, regardless of whether any of the five cobalt substances are placed in Annex XIV or not, as they do not contain any of the five cobalt compounds. However, Annex XIV listing will create uncertainty as to the ability of European industry to produce these products in future, and downstream users will need to develop new non-European sources to protect their supply chain, taking market share away from European manufacturers. The small tonnage of uses within scope will not justify companies applying for Authorisation. Only European Industry will be adversely impacted. We believe that these decisions should not be taken lightly as their economic impact on Europe can be profound. If necessary, more time should be taken to improve the quality of the data used to make the
five cobalt substances are placed in Annex XIV or not, as they do not contain any of the five cobalt compounds. However, Annex XIV listing will create uncertainty as to the ability of European industry to produce these products in future, and downstream users will need to develop new non-European sources to protect their supply chain, taking market share away from
applying for Authorisation. Only European Industry will be adversely impacted. We believe that these decisions should not be taken lightly as their economic impact on Europe can be profound.
Xstrata Nickel produces high purity cobalt metal, and does not produce any of the cobalt compounds under review. However, our concern is for the cobalt market in Europe as a whole, and for the efficacy and credibility of the REACH and the Authorisation process. To the best of our knowledge, the above statements contained here are correct, and are provided in good faith.



615	2011/09/08 09:46 File attached	Schaeffler Technologies GmbH & Co. KG	see attached statement
		BehalfOfAnOrg anisation Company Germany	
602	2011/09/07 15:59 File attached	HSO Herbert Schmidt GmbH & Co. KG BehalfOfAnOrg anisation Company Germany	Chemical processes for producing conversion coatings based on trivalent chromium compounds As already stated above have been for quite some time solutions based on trivalent chromium compounds, for producing conversion coatings in use. These solutions also contain neutral salts, which are partly in the food sector. Here are inter alia Sodium fluoride (toothpaste) and sodium nitrate (pickling salt) to call. The trivalent chromium compounds are used with the neutral salts and complexes react with the metal surface of the immersed part. In this way arise suitable chromium (VI)-free conversion coatings. It is shown that Cr (III)-based passivation only with high corrosion protection is possible if the application solutions of cobalt salts and cobalt can be added with relative



575	2011/09/01 13:44	Umicore NV/SA BehalfOfAnOrg anisation Company Belgium	<ul> <li>We would like to emphasize the following:</li> <li>The actual EU tonnage of cobalt dinitrate (overall industry total) is in the range of 100-1.000tpa, in contrast with range of 1.000-10.000 tpa as reported in the consultation document. In addition 90-99% is used as intermediate and therefore exempted from authorization, suggesting the volume of cobalt dinitrate in scope of authorization is negligible.</li> <li>A REACH registration dossier and chemical safety report were submitted for cobalt dinitrate by the end of 2010. This includes an exposure scenario for each identified and supported use, each resulting in a risk characterization ratio below 1. Therefore it can be safely assumed that all uses of cobalt dinitrate in the EU are well controlled and the criteria of `wide dispersive use' are not met.</li> <li>Cobalt dinitrate is already controlled by existing legislation to protect human health and environment. As an example risk management is already imposed by the carcinogens at work directive (2004/37/EC) and the IPPC directive (2008/1/EC). Furthermore all CMR compounds are restricted for supply to the general public, excluding consumer exposure (REACH, Annex XVII, entry 28-30).</li> <li>There is a misconception regarding interchangeability. It should be noted that cobalt dinitrate cannot be easily substituted by other cobalt salts in its applications. In nearly all cases it is neither technically and/or economically feasible to implement such a change. Based on the above Umicore is of the opinion that including cobalt dinitrate in Annex XIV seems disproportionate.</li> <li>In addition to the above we support the comments made by the Cobalt REACH Consortium (CoRC).</li> </ul>
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566	2011/08/30	Cobalt REACH	INTRODUCTION
	21:56	Consortium Ltd	
	File attached	(CoRC) BehalfOfAnOrg anisation Industry or	The following joint response comments are provided by the Secretariat of the Cobalt REACH Consortium Ltd (CoRC) on behalf of the Consortium member companies. The Cobalt REACH Consortium was founded in November 2007 by the Board of Directors of the Cobalt Development Institute (CDI) to implement REACH on behalf of the cobalt industry. There are currently 50 Regular members of the Consortium. The Consortium member companies and their affiliates constitute over 80 industry companies involved in the manufacturing and/or import of cobalt
		trade association United	substances in Europe as well as other international jurisdictions. There are also some downstream users represented amongst the Consortium membership.
		Kingdom	The Cobalt Consortium provided joint response comments to the first consultation conducted for cobalt dinitrate in 2010 (SVHC proposal and Annex XV dossier by The Netherlands).
			VOLUME(S) IMPORTS/EXPORTS (Section 2.1.1, page 1)
			Data on the tonnage of cobalt dinitrate manufactured/imported in the EU collected by the CoRC from EU manufacturers and downstream users in 2011 indicate that the range of 1,000 – 10,000 quoted in the consultation document from REACH registration data is a significant overestimate of the actual volume of cobalt dinitrate on the EU market. The total tonnage of cobalt dinitrate registered under REACH in the EU incorporates its use as an on-site intermediate in the manufacture of other cobalt salts/chemicals, and is not relevant for prioritisation for the purposes of Authorisation. Based on industry data collated by the CoRC from EU Manufacturers and Downstream Users, the total tonnage of cobalt dinitrate on the EU market, corrected for export, is between 100 and 1,000 tonnes per year. Data collated by the CoRC suggests that that the proportion of the annual tonnage expected to be within the scope of Authorisation is <<< 1% of the EU tonnage.
			Information on the further uses identified in the background document (additional to those listed above) is anecdotal and it is not currently possible for the CoRC to confirm them. We consider that the vast majority of uses of cobalt dinitrate in the EU are outside of the scope of Authorisation.
			On the basis of data received by the CoRC the vast majority cobalt dinitrate produced or imported into the EU is used as an intermediate in the manufacture of other chemicals. This



includes in the production of catalysts, batteries and other chemicals. Use of cobalt dinitrate for the manufacture of active substances for the production of batteries always holds intermediate status, which in the overwhelming majority of cases is non-isolated. In catalyst production cobalt dinitrate is used as an intermediate for the production of other cobalt compounds. Cobalt dinitrate is not used as a catalyst. Use of a substance as an intermediate is exempt from Authorisation under REACH, and therefore these uses should be considered outside of the scope of Authorisation for the purposes of prioritisation.
Data obtained from EU manufacturers and Downstream Users by CoRC on the use of cobalt dinitrate in surface treatments indicate that this use is primarily considered as an intermediate as described in the REACH regulation and the registration dossier, although some companies report using cobalt dinitrate as a substance during surface treatment.
As noted, an updated summary of exposure scenarios developed by the CoRC for the REACH registration of cobalt dinitrate is attached to this consultation response.
The ECHA background document states that all the identified uses of cobalt dinitrate have been registered as industrial, but that it is assumed that the produced mixtures will also be handled by professionals and consumers. We consider that this assumption by ECHA, as it is currently reported, is unjustified and this contention should be supported by reference to additional compelling data in a revised version of the background document. All uses of cobalt dinitrate identified in its REACH registration dossier are for industrial uses only and either relate to intermediate use or an end use. Therefore, the exposure of professional users (in particular via inhalation, which is the critical exposure route) from the uses identified in the REACH dossier is not expected to occur.
The data reported for consumer exposure to cobalt salts (i.e. cosmetics) are not specific to cobalt dinitrate (but relate to cobalt metal) and should be revised or omitted from the background document as they are not directly relevant to cobalt dinitrate. The CoRC do not consider there to be any consumer uses of cobalt dinitrate.
GEOGRAPHICAL DISTRIBUTION AND CONCLUSIONS IN TERMS OF (ORGANISATION AND COMMUNICATION IN) SUPPLY CHAINS (Section 2.2.2.3, page 4)
Currently, no information on the number or geographical location of sites is provided in the



consultation document. As the complexity of the supply chain is one of the factors that feeds into the prioritisation score this section should relate solely to the geographical distribution and supply chain of the uses that are potential candidates for Authorisation. CoRC would welcome
that the structure of section 2.2.2.3. be changed to only include uses in scope of Authorisation. AVAILABILITY OF INFORMATION ON ALTERNATIVES (Section 2.3, page 4)
It is not reasonable to assume that other cobalt salts could generally replace cobalt dinitrate for its applications. Although common uses may have been identified in generic exposure scenarios this does not mean that the exact use is the same, nor that it is technically or economically feasible to implement this change.
Industrial processes are usually designed for a specific salt and it would not be a simple matter of replacing one salt with another. Even if the salt could be substituted chemically there would be a number of practical considerations to take into account. No interchangeability would be possible without considerable development work and costs to switch from cobalt dinitrate to another salt.
For example, the only other species used in a similar way as an intermediate for the production of other cobalt compounds in catalyst production is cobalt carbonate. However the processes used and equipment are entirely different and cobalt carbonate and dinitrate cannot be used interchangeably in the same plant. Cobalt dinitrate and cobalt carbonate are not interchangeable in catalyst production with other cobalt salts.
It is not necessary to comment on alternatives for the uses that are outside of the scope of Authorisation (e.g. intermediate uses, exemptions).
A small number of uses (as a surface treatment in some cases, and potentially as a corrosion inhibitor) may be within scope of Authorisation. No information is available on potential alternatives for either of these uses.
EXISTING SPECIFIC COMMUNITY LEGISLATION RELEVANT FOR POSSIBLE EXEMPTION (Section 2.4, page 4)
The Carcinogens Directive (90/394/EEC), Directive 98/24/CE, Directive 2004/37/CE all apply to



CMR compounds. Risk management is already required by existing legislation as for example the carcinogens at work directive (Dir. 2004/37/EC) and the IPPC directive (Dir. 2008/1/EC).
ANY OTHER RELEVANT INFORMATION (e.g. for Priority setting) (section 2.5, page 4)
Despite the fact that the use of cobalt dinitrate for the manufacture of other cobalt compounds in the catalyst industry is exempted from authorisation (as an intermediate), a listing in Annex XIV could have serious consequences for the availability of this crucial raw material. The restrictions on the availability of cobalt-containing catalysts in the EU would result in reduced economic and environmental efficiency. This possible consequence should be considered carefully before the final decision on inclusion of cobalt dinitrate in Annex XIV. Highly efficient cobalt-containing catalysts are beneficial for industrial applications. With a catalyst, chemical reactions can be performed at lower temperature, lower pressure or with lower by-product formation. Highly efficient catalysts are crucial for further improvement of chemical processes to make them more eco friendly and more cost efficient by reducing hydrogen consumption and hence CO2 emission.
PRIORITISATION (Section 3.1, page 5)
The data in the registration dossier and updates to be submitted by the end of this year indicate that cobalt dinitrate is non genotoxic in vivo, suggesting a threshold mode of action. We acknowledge that ECHA have taken account of the new data indicating that cobalt dinitrate has a threshold concentration for carcinogenicity in the scoring for inherent properties. The CoRC support a score of 0 (carcinogenic with threshold) for the Inherent Properties element of the prioritisation score.
Based on the volumes reported in the background document, up to 85% of the use of cobalt dinitrate in the EU is likely to be outside of the scope of Authorisation. Data recently collated by the CoRC from EU manufacturers and downstream users indicate that the volume outside of the scope of Authorisation could be between 90 to 99%, dependent on the interpretation of intermediate use. The background document states that a relatively low volume is within scope of Authorisation and data collected by CoRC concurs with this. Based on an EU tonnage of <1000tpa (CoRC data) a volume score of 5 is more appropriate for cobalt diacetate than the 7 proposed in the ECHA background document. Based on the data collected by the CoRC from EU Manufacturers and Downstream Users, there are between 10 – 20 sites involved in the uses of cobalt diacetate within the scope of



	2011/08/24 14:02	WWF European Policy Office BehalfOfAnOrg anisation International NGO Belgium	Authorisation. We would consider that a site score is of 2 is therefore more appropriate than the 3 in the ECHA background document. The use of cobalt diacetate at these sites is controlled under existing legislation and has been shown in the CoRC REACH CSR for cobalt diacetate to have RCR below 1. As such, the appropriate release score for this use would therefore be 1 (non-diffuse, controlled), rather than the 3 (diffuse, uncontrolled, significant) proposed in the ECHA background document. The overall prioritization score would therefore be: 0-1 (properties) + 5 (volume) + 2 (WDU) = 7-8 ECHA states the cobalt diacetate is of high priority and should be placed on Annex XIV as there are other cobalt compounds that could replace it. We would argue that a lower score (7-8) should be assigned, due to the lower number of sites in scope and the minimal potential releases from the uses in scope and we disagree strongly with the statement that other cobalt diacetate should be prioritized for inclusion on Annex XIV. REFERENCES (Section 4, page 7) Please note that the internet links provided under '4. References' are no longer working. Without being able to retrieve the information on which the Annex XV based it is not possible for independent third parties to make a proper assessment and comments.
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2011/08/19	European	2.2.2.1 Manufacture and releases from manufacture:
16:32	Catalyst	Pg 2. Cobalt dinitrate is transported isolated intermediate (i.e. as raw material), or on-site
	Manufacturer's	isolated intermediate, or non-isolated intermediate in the manufacturing process of catalysts.
	Association	During the manufacturing process the dinitrate is completely converted into other cobalt
File attached	(ECMA)	compounds (e.g. cobalt carbonate, cobalt oxide, tricobalt tetraoxide) by co-precipitation and/or
Confidential		heat-treatment processes. As an intermediate the release/exposure from manufacture is
		minimal. (See confidential annex submitted already to ECHA in the first consultation period).
	BehalfOfAnOrg	2.2.2.2 Uses and releases from uses:
	anisation	Manufacture of other chemicals:
	Industry or	p. 2 'uses' 2. par: The European Catalyst Manufacturers Association (ECMA)has confirmed the
	trade	use of Cobalt dinitrate as an intermediate for the production other cobalt compounds during
	association	catalyst manufacture.
	Belgium	Cobalt dinitrate is used as an intermediate in the manufacturing process of hydroprocessing
		catalysts (HPC), hydrodesulphurization catalysts (HDS), catalysts for Fischer Tropsch reaction
		(GTL - conversion from gas to liquid fuel), and certain hydrogenation catalysts.
		Cobalt dinitrate is transformed by precipitation and/or calcination processes and the substance is
		entirely consumed in the course of the catalyst manufacturing process. This salt is not contained
		in the final catalyst mixture and cannot be considered as catalyst itself.
		As a catalyst:
		P3: Bullet point: "As a catalyst:" We as ECMA can confirm that the statement in the ECHA
		document is correct for ECMA member companies.
		Releases from uses:
		P: 4: Releases and occupational exposure data of the catalyst industry are available and were
		considered in the registration dossier and CSR. According to this assessment the exposures are
		well controlled and would not constitute a relevant risk for humans and the environment.
		2.2.2.3 Geographical distribution and conclusions in terms of (organisation and communication
		in) supply chains:
		Pg 4. The use as an intermediate in manufacture of catalysts is actually a production of other
		chemicals and thus cobalt dinitrate does not appear as a component in the final catalyst mixture
		and thus there are no direct downstream users.
		2.3 Availability of information on alternatives:

Pg 4. ECMA has already provided the following information: The performance of a catalyst is based on its adsorption properties. These properties are based on the electronic structure (chemical) but also on physical properties (e.g. specific surface area). Development of efficient catalysts is a complex task, as in most cases not only one substance is



<ul> <li>involved. Catalyst performance is a sophisticated interaction of many different metals.</li> <li>Suppression of one metal influences the whole interaction and will result in a significant drop or even loss of performance. Limiting industry to non-Cobalt alternatives would significantly affect further development of efficient catalysts and would result in less efficient processes associated with higher energy consumption and higher emissions at the sites of the catalyst users and from the use of the products resulting from the processes catalysts are used in. For example emissions of sulphur dioxide and nitrogen oxide from burning of fossil fuels will most likely rise.</li> <li>3.1 Prioritisation:</li> <li>Pg 5. Based on both scoring (i.e. 35% of the use in the EU is in catalyst manufacture and thus this volume should not be in the scope of the authorisation (as it is exempt).</li> <li>Risk management is already required by existing legislation as for example the carcinogens at work directive (Dir. 2004/37/EC and the IPPC directive (Dir. 2008/1/EC) and is in our opinion sufficiently effective.</li> <li>Other comments on the draft Background documentation:</li> <li>Although the use of Cobalt dinitrate as intermediate for the manufacture of other cobalt compounds in the catalyst industry is exempted from authorisation, a listing in Annex XIV could have serious consequences for the availability of this crucial raw material and the subsequent availability of cobalt containing catalysts in the EU and worldwide. This possible consequence should be considered carefully before the final decision on inclusion of Cobalt dinitrate in Annex</li> </ul>
<ul> <li>XIV.</li> <li>Economic and Environmental efficiency:</li> <li>Highly efficient Cobalt-containing catalysts are beneficial for industrial (chemical, petrochemical) applications. Using a catalyst, chemical reactions can be performed at lower temperature, lower pressure or with lower by-product formation. Highly efficient catalysts are crucial for further improvement of chemical processes to make them more eco friendly and more cost efficient by reducing hydrogen consumption and hence CO2 emission.</li> <li>Environmental benefits of low-sulphur and low-nitrogen fuels:</li> <li>The applications of catalysts manufactured using Cobalt dinitrate intermediates contributes to large scale positive effects in the reduction of sulphur and nitrogen in fuels and hence the reduction of sulphur dioxide (SOx) and nitrogen oxide (NOx) emissions upon burning of fossil fuels. For comparison 1 ton Cobalt applied as catalyst mixture contributes to a SOx emission reduction of 25,000 tons and a NOx emission reduction of 750 tons per year.</li> <li>Cobalt-containing catalysts are needed to comply with other pieces of EU legislation:</li> <li>Compliance with several EU Directives on Ambient Air Quality and reduction of SOx and NOx emissions from fuel burning is dependent on the production of low sulphur and nitrogen</li> </ul>



	containing fuels, which is only achievable with cobalt containing catalysts. Comments relating to chemical inter-changeability: ECMA has already provided the following information on replacement of Co-dinitrate in the catalyst manufacturing process by other Co-salts: As illustrated in the confidential annex Cobalt dinitrate and Cobalt carbonate may be used depending on the processes at different stages of a multistage reaction and therefore are not interchangeable in the catalyst production with other cobalt salts (on the candidate list). During thermal treatment (drying and calcination steps) nitrate anion will decompose to NOx, which is easily removed from the resulting cobalt oxides containing catalysts or catalyst precursors. NOx is decomposed in a DeNOx unit to avoid NOx emissions into the environment. Anions of other common Cobalt salts like Cobalt dichloride and Cobalt sulphate are less easily removed and would stay on the catalyst surface. This is not desired as chlorides and sulphates reduce the catalyst reactivity. Furthermore chloride is known to be highly corrosive, an undesirable property in the catalyst performance that would dictate the use of more expensive corrosion-resistant material for construction of catalytic reactors and piping as well as additional measures in handling these materials. The use of Cobalt dinitrate as intermediate for the manufacture of other cobalt compounds in the catalyst industry is exempted from authorisation according to Article 2.8. (b) of Regulation (EC 1907/2006). Details of the use of Co-dinitrate in the ECMA member companies are given in the confidential annex.
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## **II - TRANSITIONAL ARRANGEMENTS. COMMENTS ON THE PROPOSED DATES:**

1807       2011/09/14       ACEA -       See attachment.         20:51       European       Automobile       Automobile         File attached       Manufacturers       Association       BehalfOfAnOrg         BehalfOfAnOrg       Enigetian       Enigetian       Enigetian	#	Date (Attachment provided)		Comment
Industry or trade association Belgium	1807	20:51	14 ACEA - European Automobile Manufacturers Association BehalfOfAnOrg anisation Industry or trade association	See attachment.



1744	2011/09/14 18:41	The Cobalt Development Institute BehalfOfAnOrg anisation Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt diacetate in Annex XIV of REACH (submitted September 2011)
1853	2011/09/14 18:41 File attached	The Cobalt Development Institute BehalfOfAnOrg anisation Industry or trade association United Kingdom	<ul> <li>Please refer to the following document for technical details:</li> <li>1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011</li> <li>2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt diacetate in Annex XIV of REACH (submitted September 2011)</li> </ul>



1676	2011/09/14 16:58	SETS BehalfOfAnOrg anisation Company France	We need an extension of the deadlines (30 months instead of 24 months). Alternatives are not controlled today. If the extension of the deadline is not granted, we are afraid of consequences on the possibility of a delocalization of activities (in developing countries where workers and environment are not protected by regulations as high as the European regulations).
1653	2011/09/14 16:21	PortugalPortug uese Environment Agency MemberState Portugal	<div></div>



1619	2011/09/14 15:41 File attached	Individual France	We need an extension of the deadlines (30 months as mentioned in the recommendation). Please see the enclosed letter.
1545	2011/09/14 14:20 File attached	Enthone GmbH BehalfOfAnOrg anisation Company United Kingdom	See attached



1229	2011/09/14 01:05 File attached	CETS aisbl BehalfOfAnOrg anisation Industry or trade association Germany	Should cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate be prioritised for Annex XIV inclusion, it is imperative that the application and sunset dates be extended. As a non-threshold carcinogen, an application for authorization for the Cobalt salts will need to include a socio-economic analysis. Given the complexity of the supply chains of articles subject to surface treatment, additional time is needed. In that respect, the following dates should apply: application date (date for submitting applications for authorisation): July 2015 ; and sunset date: January 2017. A failure to grant additional time would have the practical effect of transforming the Annex XIV listing into an outright ban.
1139	2011/09/13 18:32 File attached	Individual Italy	We need an extension of the deadlines (30 months as mentioned in the recommendation). Please see the enclosed letter.



1122	2011/09/13	Atotech	If the cobalt salts are included in Annex XIV in the near future the proposed timeframe is too
	18:10	Deutschland	short for several reasons:
		GmbH	• Article 55 says that it is the aim to "ensure the good functioning of the internal market"
			by progressively replacing SVHC by "suitable alternative substances or technologies where these
			are economically and technically viable".
		BehalfOfAnOrg	The regulation specifically uses the word "progressively" implying that the users must be granted
		anisation	an appropriate timeframe for the transition from one technology/substance to another, where
		Company	possible.
		Germany	• The authorization process is new and has never been used before. This implies that the
			applicants as well as all associated supporting entities need time to adapt to this new
			requirement in order to be able to provide information and documentation in accordance with
			regulation's requirements. 18 months are not an appropriate timeframe considering that
			o small and medium users need external support for this process,
			o users may wish to organize in groups for cost sharing,
			o users have to select appropriate supporters,
			o documents need to be finalized including reviews etc.,
			o the capacity of supporting entities is limited.
			• Five cobalt salts are present in ECHA's draft recommendation for inclusion on Annex XIV.
			As these salts and chromium trioxide are used for surface treatment, this sector of industry does
			not have the capacity of handling two authorization processes at a time. Surface treatment shops
			usually are small to medium size companies that do not have the capacity to handle regulatory
			requirements of this extent as dedicated personnel is required.
			Transitions to new technologies or new requirements involve a considerable complex
			process, investments and time. A complex process involving the whole supply-chain is triggered.
			Solely qualification processes for example for electronics applications take several years from the
			developed technology until application at the final product. Clearly these processes are very
			complex as the final product's properties may be safety-relevant.



976	2011/09/13 14:43	Sweden	We agree with the proposed dates.
		MemberState Sweden	
925	2011/09/13 13:09	Dr. Kubitz GmbH	Too early
		BehalfOfAnOrg anisation Company Germany	



887	2011/09/13 11:43	European Aviation Safety Agency BehalfOfAnOrg anisation European Institution Germany	This chemical substance is used in manufacturing and or maintenance of aviation products and parts. It might not be easy to find an alternative substance that would have the same attributes and or performance and the banning of such substance may therefore have a negative impact on aviation safety. We invite the ECHA to consider a possible exemption for the use in aviation applications or an appropriate transition period. The European Aviation Safety Agency is willing to contribute to a discussion on such exemption or transition.
792	2011/09/12 15:59	BehalfOfAnOrg anisation Company United Kingdom	Taking into account the time needed for eventual changes in industrial process or substitution at industrial scale, we think it is reasonable to propose a sunset date 36 months after the application date.
791	2011/09/12 15:58	SAFT BehalfOfAnOrg anisation Company France	NOT RELEVANT as cobalt dinitrate holds INTERMEDIATE STATUS in the manufacturing of active material for battery electrodes.



741	2011/09/12 11:16	BehalfOfAnOrg anisation Company France	We need an extension of the deadlines
674	2011/09/09 12:47	Assogalvanica BehalfOfAnOrg anisation Industry or trade association Italy	Since cobalt dinitrate is considered not to be included in Annex XIV, new deadline and sunset date are proposed to be set whenever more detailed information are available about the intermediate definition and the any possible replacement substances to cobalt salts.



566	2011/08/30 21:56 File attached	Cobalt REACH Consortium Ltd (CoRC)	24 months to submit an application would seem reasonable and longer than some of the other substances listed. However the sunset date of 18 months seems extremely short considering the time it would take to implement a change in process or substitution at an industrial scale for the uses in scope of Authorisation. A minimum period of 36 months would be more reasonable.
		BehalfOfAnOrg anisation Industry or trade association United Kingdom	
549	2011/08/24 14:02	WWF European Policy Office BehalfOfAnOrg anisation International NGO Belgium	The timelines foreseen for transitional arrangements are too long. They should be shortened to an application date of 12 months (sun set date 30 months) after the date of inclusion in Annex XIV.



## **III - COMMENTS ON USES THAT SHOULD BE EXEMPTED FROM AUTHORISATION, INCLUDING REASONS FOR THAT:**

#	Date (Attachment provided)	Submitted by (name, Organisation/ MSCA)	Comment
1807	2011/09/14 20:51 File attached	ACEA - European Automobile Manufacturers Association	See attachment.
		BehalfOfAnOrg anisation Industry or trade association Belgium	
1790	2011/09/14 19:55	European Federation of pharmaceutical Industries and associations BehalfOfAnOrg anisation International organisation Belgium	Use as an analytical reagent Cobalt (II) dinitrat , 6H2O is used in the laboratory for analytical methods described in pharmacopoeias such as the European Pharmacopoeia and can not be readily substituted. This reagent is used to prepare a 100 ppm limit test solution per section 4.1.2, Standard Solutions for Limit Tests. It is also used in the preparation of Cobalt Nitrate Solution R, which is then used in the identity tests for the Carisprodol, Meprobamate, Valproic Acid, Macrogols, and Polysorbate 20, 40, 60 and 80 monographs. Significance of the European Pharmacopoeia The European Pharmacopoeia (Ph. Eur.) is prepared under the authority of the Council of Europe. The governments of Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, 'the former Yugoslav



Republic of Macedonia', Turkey and the United Kingdom currently recognize the European Pharmacopoeia. Articles (drug substance or excipients) covered by a Ph. Eur. monograph must meet the requirements of the monograph, including any applicable general tests referenced by the monograph in order to be legally marketed or used in a marketed medicinal product. EFPIA Recommendation In the light of the above considerations, EFPIA Recommends that cobalt (II) dinitrate be exempt from authorisation for any use in the research, development, manufacture or anlytical control of medicinal products and their ingredients and for any corresponding uses in relation to medical devices. This should cover the steps starting from manufacture of the substance (already exempted), filling into packages, preparation of formulations described in standards (DIN, EN, ISO and ASTM), Pharmacopoeias (Reag. Ph. Eur. and ACS) till the use as calibration standard for ICP and AAS. The use of these formulations for scientific R&D (< 1t/a) is already exempted. The criteria for prioritization of substances for inclusion into Annex XIV are listed in Art. 58 (3): a) PBT or vPvB properties, or b) wide dispersive use, or



1779	2011/09/14 19:38 File attached Confidential	BehalfOfAnOrg anisation Company Germany	Die mbw-Gruppe kann auf Grund der oben angeführten Argumente die Aufnahme der Kobalt- Salze in den Anhang XIV der REACh-Verordnung nicht unterstützen. Im Falle einer Aufnahme der Stoffe Kobalt(II)-dinitrat, Kobalt-dichlorid, Kobalt(II)-sulfat, Kobalt(II)-diacetat, Kobalt(II)-carbonat in den Anhang XIV der REACh-Verordnung fordert die mbw-Gruppe eine Ausnahmeregelung für die Verwendung von Kobaltsalzen in Lösungen zur Erzeugung von Konversionsschichten auf Zink- und Zinklegierungsschichten bei galvanischen Korrosionsschutzsystemen.
1760	2011/09/14 18:58	Association of the British Pharmaceutical Industry BehalfOfAnOrg anisation Industry or trade association United Kingdom	General Comments: ABPI has noted with interest the call by ECHA of June 2011 for comments on proposals to include a number of new substances, including Cobalt dinitrate, in Annex XIV of the REACH Regulation as substances of very high concern (SVHCs) which would require authorisation for their use. A number of these substances including cobalt dinitrate have critical uses in the research, manufacture and control of medicinal products for which there are, at this time, no practical alternatives. The details relating to cobalt dinitrate are set out below and ABPI asks that, if it is to be included in Annex XIV, it be exempted from the necessity for authorisation for its use in research, development, manufacture or anlytical control of medicinal products and their ingredients and for any corresponding uses in relation to medical devices. Use as an analytical reagent: Cobalt (II) dinitrat , 6H2O is used in the laboratory for analytical methods described in pharmacopoeias such as the European Pharmacopoeia and can not be readily substituted. This reagent is used to prepare a 100 ppm limit test solution per section 4.1.2, Standard Solutions for Limit Tests. It is also used in the preparation of Cobalt Nitrate Solution R, which is then used in the identity tests for the Carisprodol, Meprobamate, Valproic Acid, Macrogols, and Polysorbate 20, 40, 60 and 80 monographs. Significance of the European Pharmacopoeia The European Pharmacopoeia (Ph. Eur.) is prepared under the authority of the Council of Europe. The governments of Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy,



<ul> <li>Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, 'the former Yugoslav Republic of Macedonia', Turkey and the United Kingdom currently recognize the European Pharmacopoeia. Articles (drug substance or excipients) covered by a Ph. Eur. monograph must meet the requirements of the monograph, including any applicable general tests referenced by the monograph in order to be legally marketed or used in a marketed medicinal product. ABPI Recommendation:</li> <li>In the light of the above considerations, ABPI Recommends that cobalt (II) dinitrate be exempt from authorisation for any use in the research, development, manufacture or anlytical control of medicinal products and their ingredients and for any corresponding uses in relation to medical devices.</li> <li>This should cover the steps starting from manufacture of the substance (already exempted), filling into packages, preparation of formulations described in standards (DIN, EN, ISO and ASTM), Pharmacopoeias (Reag. Ph. Eur. and ACS) till the use as calibration standard for ICP and AAS. The use of these formulations for scientific R&amp;D (&lt; 1t/a) is already exempted. The criteria for prioritization of substances for inclusion into Annex XIV are listed in Art. 58 (3): <ul> <li>a) PBT or vPvB properties, or</li> <li>b) wide dispersive use, or</li> <li>c) high volumes.</li> </ul> </li> <li>None of these criteria applies to cobalt (II) dinitrate. As mentioned in the background document, the volume of cobalt (II) dinitrate regulated by the authorization in the EU is quite low and the uses of the substance are not considered as wide dispersive.</li> <li>Nevertheless, we understand the need for the authorization of cobalt (II) dinitrate (regulatory effectiveness) to prevent the switch from other cobalt salts, which are fulfilling the criteria of Art. 58 (3), to cobalt (II) dinitrate for some uses. However, this should not lead to authorization for us</li></ul>



1744	2011/09/14 18:41	The Cobalt Development Institute BehalfOfAnOrg anisation Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt diacetate in Annex XIV of REACH (submitted September 2011)
1853	2011/09/14 18:41 File attached	The Cobalt Development Institute BehalfOfAnOrg anisation Industry or trade association United Kingdom	<ul> <li>Please refer to the following document for technical details:</li> <li>1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011</li> <li>2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt diacetate in Annex XIV of REACH (submitted September 2011)</li> </ul>



1676	2011/09/14 16:58	SETS BehalfOfAnOrg anisation Company France	Our factory is regulated by the european IED directive (emission limit values in water and air). We consider this directive as the legal basis of exemptions possibilities.
1653	2011/09/14 16:21	PortugalPortug uese Environment Agency MemberState Portugal	<div></div>



1619	2011/09/14 15:41 File attached	Individual France	Automated processed and enclosed processes (without emissions) in surface treatment should be exempted, as well as activities covered by IED directive. In galvanic industry, Cobalt dinitrate is used in trivalent chromium conversion layers on zinc. The process consists of treating a zinc plated article with a conversion solution to create a thin protective film to improve corrosion resistance. Passivation with trivalent chromium and Cobalt dinitrate has been create to replace hexavalent chromium. passivation. Cobalt dinitrate enhances corrosion resistance of zinc
1612	2011/09/14 15:26	BehalfOfAnOrg anisation Company United Kingdom	Cobalt dinitrate in passivation solutions for the passivation of zinc nickel. Zinc nickel passivated with a trivalent chromium passivation solution (which contains cobalt dinitrate) is the main potential plating alternative to cadmium / hexavalent chromium that Aerospace and Military have spent years developing. If it cannot be passivated, it will not be viable. Tonnage of nickel dinitrate used in the process and exposure are low.



1579	2011/09/14 14:47 File attached	Dr. Hesse GmbH & Cie. KG	siehe Erläuterungen unter "General comments"
		BehalfOfAnOrg anisation Company Germany	
1545	2011/09/14 14:20	Enthone GmbH	See attached
	File attached	BehalfOfAnOrg anisation Company United Kingdom	



1515	2011/09/14 12:44 File attached	RECHARGE aisbl BehalfOfAnOrg anisation Industry or trade association Belgium	As an intermediate in the Manufacturing of a battery, Cobalt (II) Dinitrate should be exempted from the Authorization process according to REACH Regulation Title I, Chapter I, Article 2 (8) (b).
1459	2011/09/14 11:06 File attached	Arnold Umfomtechnik GmbH&Co.KG Member of Würth Company BehalfOfAnOrg anisation Company Germany	We recommend exemptions for following applications : o chemicals industry o electroplating industry o protechtion against corrosion o surface treatment o surface protection o protection of zinc and zinc alloy plating



1451	2011/09/14 10:51 File attached	A.M.P.E.R.E. DEUTSCHLAND GmbH BehalfOfAnOrg anisation Company Germany	In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative, bright and functional Cobalt-Alloy-Plating.
1229	2011/09/14 01:05 File attached	CETS aisbl BehalfOfAnOrg anisation Industry or trade association Germany	<ul> <li>Use of Cobalt(II) dinitrate for plating</li> <li>National and European law already require aspects of regulatory monitoring and control as well as to the increasing internationalization of requirements. Any additional configurable prioritization and approval of changes will only reproduce the current national requirements. Taking these experiences into account an inclusion of cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate for plating in Annex XIV of the REACh regulation is not necessary.</li> <li>Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-acetate and cobalt(II)-acetate and cobalt(II)-acetate and cobalt(II)-acetate from the use of cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-carbonate from the authorisation requirements.</li> <li>In accordance with the provisions of REACh the risk of the application is properly controlled by European and national laws.</li> <li>In the EU, the human health and environmental aspects for safe handling of Cobalt(II) salts are regulated the following laws and regulations:</li> <li>EG 1907/2006 (REACH-regulation)</li> <li>2002/95/EG (ROHS)</li> <li>2002/96/EG (WEEE)</li> <li>196/82/EG (Seveso-II-RL)</li> <li>2010/75/EU (IVU)</li> <li>2000/60/EG (WRR)</li> <li>98/249/EG</li> </ul>



1210	2011/09/13 21:29 File attached	BehalfOfAnOrg anisation Company United Kingdom	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Chromium trioxide (-solutions) from the authorisation requirements. Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled. In the establishment of such exemptions, account shall be taken, in particular, of the proportionality of risk to human health and the environment related to the nature of the substance, In the EU, human health and environmental aspects for safe handling of Chromium trioxide (- solutions) are regulated by the following laws and regulations: EC 1907/2006 (REACH-regulation) EC/1272/2008 (GHS-regulation) 2002/95/EC (ROHS) 2002/95/EC (ROHS) 2002/96/EC (WEEE) 196/82/EC (Seveso-II-RL) 2010/75/EU (IVU) 2000/60/EC (WRR) 98/249/EC For all these reasons we file for an exemption of the application of solutions containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)- carbonate in galvanic surface treatment technologies.



1189	2011/09/13 19:54 File attached	verband der Automobilindus trie VDA BehalfOfAnOrg anisation Industry or trade association Germany	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Cobalt (II) dinitrate from the authorisation requirements. In accordance with the provisions of REACh the risk of the application is properly controlled by the German laws.
1168	2011/09/13 19:12 File attached	BehalfOfAnOrg anisation Company United Kingdom	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Chromium trioxide (-solutions) from the authorisation requirements. Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled. In the establishment of such exemptions, account shall be taken, in particular, of the proportionality of risk to human health and the environment related to the nature of the substance, In the EU, human health and environmental aspects for safe handling of Chromium trioxide (- solutions) are regulated by the following laws and regulations: EC 1907/2006 (REACH-regulation) EC/1272/2008 (GHS-regulation) 2002/95/EC (ROHS) 2002/95/EC (ROHS) 2002/96/EC (WEEE) 196/82/EC (Seveso-II-RL) 2010/75/EU (IVU) 2000/60/EC (WRR) 98/249/EC For all these reasons we file for an exemption of the application of solutions containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-



			carbonate in galvanic surface treatment technologies.
1162	2011/09/13 18:59 File attached	BehalfOfAnOrg anisation Company United Kingdom	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Chromium trioxide (-solutions) from the authorisation requirements. Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled. In the establishment of such exemptions, account shall be taken, in particular, of the proportionality of risk to human health and the environment related to the nature of the substance, In the EU, human health and environmental aspects for safe handling of Chromium trioxide (- solutions) are regulated by the following laws and regulations: • EC 1907/2006 (REACH-regulation) • EC/1272/2008 (GHS-regulation) • 2002/95/EC (ROHS) • 2002/96/EC (WEEE) • 196/82/EC (Seveso-II-RL) • 2010/75/EU (IVU) • 2000/60/EC (WRR) • 98/249/EC For all these reasons we file for an exemption of the application of solutions containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)- carbonate in galvanic surface treatment technologies.



1151	2011/09/13 18:41 File attached	BehalfOfAnOrg anisation Company United Kingdom	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Chromium trioxide (-solutions) from the authorisation requirements. Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled. In the establishment of such exemptions, account shall be taken, in particular, of the proportionality of risk to human health and the environment related to the nature of the substance, In the EU, human health and environmental aspects for safe handling of Chromium trioxide (- solutions) are regulated by the following laws and regulations: EC 1907/2006 (REACH-regulation) EC/1272/2008 (GHS-regulation) 2002/95/EC (ROHS) 2002/96/EC (WEEE) 196/82/EC (Seveso-II-RL) 2010/75/EU (IVU) 2000/60/EC (WRR) 98/249/EC For all these reasons we file for an exemption of the application of solutions containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)- carbonate in galvanic surface treatment technologies.



1139	2011/09/13 18:32 File attached	Individual Italy	Automated processes and enclosed processes in surface treatment should be exempted, as well as activities covered by IED directive. In the galvanic industry, cobalt dinitrate is used in trivalent chromium conversion layers on zinc. The process consists of plating an article with a protective film (few µm) to improve corrosion resistance. Passivation with trivalent chromium and cobalt dinitrate has been created to replace hexavalent chromium passivation. Cobalt dinitrate enhances corrosion resistance of zinc passivation part.
1138	2011/09/13 18:30 File attached	BehalfOfAnOrg anisation Company United Kingdom	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of Chromium trioxide (-solutions) from the authorisation requirements. Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled. In the establishment of such exemptions, account shall be taken, in particular, of the proportionality of risk to human health and the environment related to the nature of the substance, In the EU, human health and environmental aspects for safe handling of Chromium trioxide (- solutions) are regulated by the following laws and regulations: EC 1907/2006 (REACH-regulation) EC/1272/2008 (GHS-regulation) 2002/95/EC (ROHS) 2002/96/EC (WEEE) 196/82/EC (Seveso-II-RL) 2010/75/EU (IVU) 2000/60/EC (WRR) 98/249/EC For all these reasons we file for an exemption of the application of solutions containing cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)- carbonate in galvanic surface treatment technologies.



1122	2011/09/13	Atotech	Uses where cobalt salts can not be replaced
	18:10	Deutschland	Corrosion Protection Conversion Layers
		GmbH	Despite extensive research and development activities there is currently no alternative to cobalt
			salts in corrosion protection conversion layers if very high corrosion protection is required.
			Particularly the following industries depend on these coating systems and would be heavily
		BehalfOfAnOrg	affected if the high level of corrosion protection would be jeopardized by inclusion of cobalt salts
		anisation	in Annex XIV:
		Company	□ Automotive industry
		Germany	□ Aerospace industry
		,	□ Defense
			Other parts of industry where corrosion protection is vital for safety
			Hard Gold Coating
			Gold-cobalt layers are used in manufacturing of electronic equipment (contactors) and jewellery.
			The addition of cobalt is essential for the required characteristics of the layer: hardness, abrasion
			resistance and microstructure.
			Alternatives:
			Gold-nickel: significantly different characteristics of the surface. Particularly reduced
			hardness, solderability and long-term stability limit applicability in electronics.
			Gold-iron: No industrial application and very limited experiences about long-term stability
			Cyanide-Gold: Partially applicable for decorative applications (jewellery). Advantage from
			the health, safety and environmental point of view is doubtful.
			Tin-Cobalt Coating
			Tin-cobalt layers are used for decorative plating (substitute for decorative chrome plating). For
			barrel plating (screws and other small parts) chrome plating is not applicable and no alternative
			for tin-cobalt plating is available.
			Safe use
			The background documents for cobalt sulphate and cobalt dichloride state that "Releases at
			workplaces in industrial settings seem to be controlled in most cases but some processes,
			involving handling of powder forms of the substance have a potentially significant exposure
			potential for industrial workers." No handling of powder form of cobalt salts take place in
			industrial surface treatment. No other indications of significant exposure of workers or emissions
			to the environment are provided in the background documents or in the Annex XV reports.
			Existing specific Community regulations and national exposure limit ensure that risks are
			properly controlled.
			PPORD



			The product and process oriented research and development (PPORD) should be clearly exempted from the authorization process. Please note the following reasons: a. Alternative technology development has to use cobalt salts in order to develop further. Restrictions would hinder PPORD from fulfilling his role in the REACH framework. b. Following Article 55, the aim of the authorization is to control the risks from SVHC. In order reduce the risks from SVHC the need for PPORD is evident, which may result in optimized processes reducing the risks for human health and the environment. c. Personnel's exposure in PPORD is significantly reduced against production processes as the time of exposure is reduced, the throughput is lower by decimal powers and usually equipment with latest safety measures is used.
1118	2011/09/13 18:08 File attached	Central Association of Surface Treatment Professionals Germany (ZVO) BehalfOfAnOrg anisation Industry or trade association Germany	In the event that these substances are included in Appendix XIV of the REACH regulations we demand that there has to be an exception to the rules to allow the use of Cobalt(II)-Salts for the purpose of anti-corrosion, decorative and bright Cobalt-Alloy-Plating. Attachment (additional non-confidential information) ZVO Kommentierung: Application of divalent cobalt salts in Cobalt and Cobalt-Alloy-Layers in the European electroplating Industry



1103	2011/09/13		
	17:58	BehalfOfAnOrg	Relating to Article 58(2) of the REACH regulation it is hereby proposed to exempt the use of
		anisation	Chromium trioxide (-solutions) from the authorisation requirements.
	File attached	Company	Article 58(2): Uses or categories of uses may be exempted from the authorisation requirement
		United	provided that, on the basis of the existing specific Community legislation imposing minimum
		Kingdom	requirements relating to the protection of human health or the environment for the use of the
			substance, the risk is properly controlled. In the establishment of such exemptions, account shall
			be taken, in particular, of the proportionality of risk to human health and the environment
			related to the nature of the substance,
			In the EU, human health and environmental aspects for safe handling of Chromium trioxide (-
			solutions) are regulated by the following laws and regulations:
			EC 1907/2006 (REACH-regulation)
			EC/1272/2008 (GHS-regulation)
			• 2002/95/EC (ROHS)
			• 2002/96/EC (WEEE)
			196/82/EC (Seveso-II-RL)
			• 2010/75/EU (IVU)
			• 2000/60/EC (WRR)
			98/249/EC  For all these researching of the application of colutions containing
			For all these reasons we file for an exemption of the application of solutions containing
			cobalt(II)-sulphate, cobalt(II)-nitrate, cobalt(II)-chloride, cobalt(II)-acetate and cobalt(II)-
			carbonate in galvanic surface treatment technologies.



1061	2011/09/13 16:59	Agoria BehalfOfAnOrg anisation Industry or trade association Belgium	Agoria propose to integrate clearly the fact that most of the uses of the different cobalt salts are used as intermediate and thus exempted from the authorization procedure.
966	2011/09/13 14:30 File attached	EUROBAT BehalfOfAnOrg anisation Industry or trade association Belgium	Cobalt (II) dinitrate and Cobalt (II) sulphate are used as intermediates in preparation steps of active substances used in batteries. They are not present in batteries available to industrial or individual users. There is no substitution possible between Cobalt (II) dinitrate and Cobalt (II) sulphate and other Cobalt salts in the production process of batteries. The production of mixtures for use by the battery industry should be exempted from authorisation – for example under article 58.2 of the REACH Regulation - since these Cobalt salts are only used as intermediates in battery production.



925	2011/09/13 13:09	Dr. Kubitz GmbH	It is not possible to find or develop suitable substitutes in the available time.
		BehalfOfAnOrg anisation Company Germany	
887	2011/09/13 11:43	European Aviation Safety Agency BehalfOfAnOrg anisation European Institution Germany	This chemical substance is used in manufacturing and or maintenance of aviation products and parts. It might not be easy to find an alternative substance that would have the same attributes and or performance and the banning of such substance may therefore have a negative impact on aviation safety. We invite the ECHA to consider a possible exemption for the use in aviation applications or an appropriate transition period. The European Aviation Safety Agency is willing to contribute to a discussion on such exemption or transition.



843	2011/09/12 19:09 File attached	LKS Kronenberger GmbH Metallveredlun gswerk BehalfOfAnOrg anisation Company Germany	Because of a safety application, properly controlled risks by German laws regulations and according to article 58 (2) we file/demand an exemption of the application of Cobalt(II)-Dinitrate in surface treatment processes/galvanic surface treatment technologies.
837	2011/09/12 18:20	EDF SA	Uses: 1) First of all, cobalt (II) dinitrate hexahydrate is used on EDF nuclear power plants within the monitoring laboratories to check the condition of fuel cladding, in order to determine the amount
	File attached	BehalfOfAnOrg anisation Industry or trade association France	of caesium present in the water and in contact with the fuel assemblies. Cobalt (II) dinitrate is used as a reagent for the analysis tanks to the precipitation of cobalt process. Caesium-137 and caesium-134, generated by the radioactive fission during nuclear reactor operation, can be efficiently measured and monitored using this procedure. The use of cobalt (II) dinitrate by EDF is limited to in-laboratory measurement and monitoring procedures:
			<ul> <li>in the primary coolant liquid samples analyzed in the nuclear power plant laboratories,</li> <li>in the liquid samples taken from spent fuel pools within the fuel building in the nuclear power plant laboratories.</li> </ul>
			In the presence of high cobalt (cobalt 58 and cobalt 60) isotope activities, caesium gamma rays are hidden. Using gamma ray spectroscopy, it is sometimes difficult to measure with sufficient accuracy the activities of caesium 134 and caesium 137 in order to be able to calculate their ratio. In such a case, it is of vital importance that precipitation of cobalt be carried out prior to the activity measurement using gamma-ray spectroscopy, with the device usually used on-site. The aim of this process is therefore to extract the cobalt isotopes of cobalt to be analysed by implementing precipitation using cobalt salts. The cases when a precipitation of cobalt process should be implemented prior to the measurement of caesium activity remain exceptional, making the implementation of this process particularly rare.



<ul> <li>2) The second use of cobalt (II) dinitrate is under a liquid form and only related to the analysis procedures carried out within the EDF corporate laboratory, i.e. the Ceidre/DLAB. A cobalt (II) dinitrate solution of 1000 mg/L is used as a calibrator in the procedures using inductively coupled plasma atomic emission spectroscopy (ICP/AES). These procedures simultaneously determine the quantity (amount) of various substances (phosphorous, chrome, molybdene, manganese, vanadium, copper, nickel, arsenic, tin, cobalt, iron, silicon, aluminium, titanium and boron) within alloyed or unalloyed, as well as in nickel-based alloys. The cobalt (II) dinitrate solution is used at a maximum dilution rate of 1mL per 100 mL.</li> <li>Amounts : <ol> <li>For cobalt (II) dinitrate hexahydrate in solid form, the amounts used annually by nuclear power plants to check the behaviour of fuel are very low, ranged from 50 and 100 grams per year. Given the necessary amounts described by the precipitation of cobalt procedure and the possibility of keeping cobalt (II) dinitrate bottles open for a duration of up to 5 years, we calculate the use of the substance to be approximately 2.5 g of cobalt (II) dinitrate per year. Considering an error margin of 2, we estimated to 50 grams of cobalt (II) dinitrate in the liquid form, as used in the calibrator solutions for metal analysis plasma spectrometry techniques, the amounts purchased are, again, minute and restricted to the Ceidre/DLAB analyses. According to the information supplied by the Purchasing Division, quantities of cobalt (II) dinitrate ordered were as follows:         20 ml for the year 2010.         The amounts purchased are a good indicator but must nevertheless be kept distinct from amounts consumed, which are necessarily smaller than those indicated in this first estimate.</li> </ol></li></ul>
Substitution: Substitution studies have already been conducted by EDF and are currently in progress into further detail to find an alternative to the use of cobalt (II) dinitrate in the precipitation of cobalt process. EDF is currently continuing its substitution research but no substance tested and analyzed has, today, fully fulfilled the conditions required in efficiency on the one hand, and in worker protection on the other hand. The latest substitution studies for cobalt(II) dinitrate have not yielded any promising results.



	Two products with identical characteristics have been identified. These are cobalt (II) oxide (CoO) (CAS no. 1307-96-6) and cobalt sulphide (CoS) (CAS no. 1317-42-6). Both substances
	were rejected because they presented genuine hazards for the safety of workers.
	EDF is continuing its R& D work in order to identify a substance that can efficiently
	substitute cobalt (II) dinitrate in its procedures, without any risk for workers and the
	environment.
	Risk management:
	Handling instructions for cobalt (II) dinitrate within the EDF power plants are clearly defined and
	very strict.
	Handling is completed under a hood. Workers are required to wear all of the following: protective
	clothing that withstands acids, respiratory protection against fumes or aerosols, safety goggles
	and protective gloves. These equipments perfectly meet the requirements of directive CE
	89/686/CEE, bringing together the national provisions regulating Personal Protective Equipment
	(PPE) and the corresponding EN374 standard that specifies a test method to check the resistance
	of protective gloves against the penetration of chemical products and/or micro-organisms. The
	information, instructions and appropriate training measures are made available to workers
	handling the substance.
	Likewise, storage instructions in place are strict on the EDF power plants. The substance must be
	kept in a sealed container and stored in a well-ventilated location, kept at a constant
	temperature between +15°C and +25°C. This stock is locked in highly secure boxes in a location
	that can only be accessed by qualified or authorized personnel.
	Further, EDF makes sure its laboratories follow the very clear instructions regarding containment
	and cleaning methods. The disposal of waste is carried out according to the national regulations
	in place, which in turn respect the directive of the European Parliament relating to waste, 2008/98/CE. The laboratories must leave the chemical substance in its original container. It is
	strictly prohibited to mix it with other waste, and the treatment of non-cleaned containers is
	identical to the treatment of the product itself.
	On-site laboratories handling cobalt (II) dinitrate are requested to collect and pump all products
	that may be spilled. Specific procedures are also in place in the event of container leakage.
	In order to ensure their efficiency, these measures for the prevention of risk to workers and the
	environment when using cobalt (II) dinitrate are clearly explained in the local data sheets, which
	are drafted from safety data sheets.
	Conclusion:
	used remain rare. No substitute has, today, been discovered, and use is strictly covered by
	EDF uses only very small amounts of cobalt (II) dinitrate, and cases in which the substance is



			procedures guaranteeing risk control. EDF therefore considers that it would be particularly penalising to submit authorisation files for the little use made of the substance, if use of cobalt (II) dinitrate were to become subject to authorization.
792	2011/09/12 15:59	BehalfOfAnOrg anisation Company United Kingdom	As per REACh legislation (Title 1 – Article 2 – 8b), intermediate uses are exempted from Authorisation. The vast majority of uses (97%) is as intermediate (manufacture of other cobalt compounds, manufacture of active substances for production of batteries, manufacture of catalysts) and as such exempted from Authorisation. On top of that, CMR compounds are already covered by other legislations including: the Carcinogens Directive 90/394/EEC, Directive 98/24/CE, Directive 2004/37/EC and IPPC directive (Dir. 2008/1/EC) cover already risk management of carcinogens at work.



791	2011/09/12 15:58	SAFT	Use of cobalt dinitrate as an intermediate to manufacture active material for battery electrodes is EXEMPT FROM AUTHORISATION, according to REACH (Title 1, Chapter 1, Article 2, 8b).
		BehalfOfAnOrg anisation Company France	
741	2011/09/12 11:16	BehalfOfAnOrg anisation Company France	Automated processes and enclosed systems in surface treatment should be exempted, as well as activities covered by the IED directive.



685	2011/09/09		We suggest that all steps in the process of using cobalt dinitrate in scientific R&D should be
	14:37	BehalfOfAnOrg	exempted from authorization. This should cover the steps starting from manufacture of the
		anisation	substance (already exempted), filling into packages, preparation of formulations described in
	File attached	Company	standards or Pharmacopoeias, like e.g. NIST, Reag. Ph. Eur. and ACS, till the use as calibration
		Germany	standard for ICP, AAS and MS. The use of these formulations for scientific R&D (< 1t/a) is
			already exempted.
			Cobalt dinitrate is an important substance for scientific R&D. It is used as analytical
			reagent, e.g. as calibration standard for ICP and AAS in laboratories as well as ISO-certificated
			laboratories, and in routine analytics for quality control of pharmaceutical raw materials and
			finished products.
			No alternative methods are available for the use of cobalt dinitrate as element standard. ISO-
			certified labs and quality control labs are obliged by governmental organizations (e.g. FDA) to perform the calibration of instruments on a regular basis and therefore, have the need to use
			cobalt dinitrate formulations. It is actually not possible to replace cobalt dinitrate in these
			applications which are described in Ph. Eur., ACS and NIST. Therefore, no substitution is possible
			for these usages.
			These formulations will only be supplied in packages used in laboratories, e.g. sealed cells,
			ampoules or bottles.
			All formulations mentioned in the uses described above are used in the laboratory by industrial
			and professional users that are well-trained. The volume needed for one analysis/calibration is
			minimal.
			The exemption is required e.g. to secure the supply of medicinal products as well as the
			calibration of analytical instruments and to secure routine analytics done in laboratories.



677	2011/09/09 13:08	Hach Lange GmbH BehalfOfAnOrg anisation Company Germany	It is essential to exempt the use of Cobalt(II) dinitrate for "analysis purposes" respective "laboratory uses" from the requirement for approval, or it should be classified as an approved use.
674	2011/09/09 12:47	Assogalvanica BehalfOfAnOrg anisation Industry or trade association Italy	Cobalt dinitrate is used in the galvanic industry not as raw material but as a mixture provided by third-party companies. The preparation is used in making/integrating water solutions utilized in "sealing" operation of final products. In particular, the mixture is diluted until the concentration varies from 0.1 to 0.5%. Professional exposure during processing is not significant because of the quantities used. Moreover, operational procedures and chemical analysis are required by law in the workplace. The spontaneous release of cobalt salts from final products appears to be non-significant. This would mean that, at least in the galvanic industry, the global diffusion of contaminant in normal conditions of use would be negligible. A time range is desirable in order to conduct a complete survey on potential release. The current state of industrial research does not propose alternative substances (of minor threat) able to provide the same performance in terms of quality and durability of the final product. In addition, the lesser durability will create more waste and the need for more recycling. An alternative technology (as qualitative as the present) will not be available before 10 years ahead. In the galvanic industry, cobalt dinitrate is used in a particular treatment bath called passivation. The process consists of plating an article with a protective film (few µm) to improve corrosion resistance. The articles involved in this type of process belong to metal smallwares category. All market sectors are concerned (domestic and industrial tools, indoor/outdoor furnishing, cars, electronics, computer, etc).



			is small to medium, the possible inclusion of cobalt dinitrate inside of annex XIV would entail additional costs hardly sustainable by factories already affected by the current recession climate. It is therefore conceivable that the renunciation of the use of cobalt salts, would result in exiting the business to the advantage of non-EU competitors. The competitiveness of Italian and EU companies, in other words, would be damaged. For all the reasons above, it is suggested that at least the use of cobalt dinitrate in the galvanic industry should be exempt from any authorization.
602	2011/09/07 15:59 File attached	HSO Herbert Schmidt GmbH & Co. KG BehalfOfAnOrg anisation Company Germany	Economic importance of coating operations for Europe and for Germany Sales of passivation (chromium (III)-based) and chromate (chromium VI)-based) for galvanizing in Europe is around 40 million euros, of which about 16 million $\in$ in Germany. This corresponds to perform a cost or revenue share of around 2.5% in electroplating, the zinc coatings. This represents a production volume in Europe during the coating operations of approximately: 1.600 million $\in$ . The turnover moderate proportion of Cr (III) - based passivation is about 95% of the market segment conversion coatings for zinc and zinc alloys. The remaining sales accounted for 5% of chromium (VI)-based chromate is approximately 10% of the treated surface. The European added value of approximately $\in$ 1,600 million, which is generated by companies in the electro-galvanization, is a ban on the use of chromium (VI) - and especially of cobalt salts in Europe directly affected. • The percentage of chromium (VI)-related applications is approximately 5% = 80 million $\in$ • The proportion of cobalt-related applications is approximately 5% = $(1,200 \text{ million})$ The remaining sum of approximately $\in$ 320 million will be generated with already with cobalt and chromium (VI)-free layers, which are but usually at a lower level of quality. In addition, this segment is coated in the same facilities as the rest of goods. The withdrawal of the vast amount of attack will therefore drastically increasing fixed cost allocations. The remaining production is no longer economical to operate, would have to close the affected farms. The share of German manufacturing companies in the European market is about 40%. The production volume of galvanizing for Germany amounts to approximately EUR 640 million. Thereof is



	• the proportion of chromium (VI)-related applications around 5% = 32 million $\in$
	• the proportion of cobalt-relevant applications, about 75% = $\in$ 480 million
	5.2 Overall Economic Impact of the conversion coating
	5.2.1 Example: Automotive Industry in Germany
	A revenue share of about 45% of the coated parts of galvanizing goes into the automotive
	industry, eg for housing, mounting rails, brake parts, piping, safety clamps, gear and shock
	absorber caps, fuel pumps, screws, etc. According to VDA (as of 25/03/2011) have been built in
	Germany in 2010, 5,552,409 cars and trucks 353 576.
	With an average selling price of products produced in Germany by car of about 25,000 €
	(acceptance VDA) results in a production volume of € 140 billion alone in the German automotive
	industry, to ensure longevity and reliability requires numerous galvanized components
	(estimated at about 500 -1 000 components with a conversion coating on zinc or zinc alloy per
	vehicle).
	If the financial part is not taken into account and only be charged for the automotive industry in
	Germany finished product with> 500 parts per car, this meant that without finishing with
	galvanic zinc coating processes more than 2.8 billion pieces per year, not only in the
	electroplating were processed.
	5.2.2 Example of window fittings manufacturer
	A revenue share of about 20% of the coated parts of galvanizing goes into the manufacture of
	fittings for the window. The total demand of products for the galvanic surface treatment in
	Europe is about 25 million $\in$ per year, of which approximately $\in$ 8 million for cobalt-containing
	passivation.
	The majority of the coatings is carried out in Germany, France and Austria. The galvanic finishing
	contributes with a share of about $\in$ 100 million per year for the European national product
	caused by a high proportion of manual labor secured jobs for 3,000 people.
	Generate a total of European manufacturers of window and door hardware has annual sales of
	about 3000-4000 million € and employs about 16,000 - 20.00 employees.
	The high conservation value of the electroplated components contributes significantly to the
	durability of the manufactured goods sector, in particular the window at. A ban on the use of
	cobalt salts in passivation would reduce the corrosion protection of coated parts, and thus clearly
	have a negative impact on the longevity and sustainability of industrial economic activity in
	Europe. Increased use of raw materials and additional energy consumption would result and
	would reduce Europe's climate protection goals and aspirations for the burden of CO2 emissions.
	SUMMARY
	Essential property of coated steel parts used in all areas of industry, commerce and even in



households is used, the cathodic corrosion protection by zinc and zinc alloy layers, which is amplified by conversion layers. It is and remains an ongoing task of the electroplating industry,
with new and / or improved functionality and durability of the coating processes to ensure the
products. At the same time through the regeneration process solutions to extend the service life,
reduced energy and material use and thus reduces pollution.
Cobalt-free thick film passivation for zinc and zinc-iron alloys are currently in development. As at
time of testing in many cases can replace the conventional thick film passivation with cobalt
salts. However, to date there is only a limited field experience. Here is an extensive testing is
required by the galvanic shops; improvements and adjustments in the application of technology
must be developed. In addition, the laboratory testing of the layers and the functional testing
and field testing is required by end-users to determine the film properties in real practical use to
try and make sure. In large areas of security aspects are taken into account.
The HSO Herbert Schmidt GmbH & amp; Co. KG therefore assumes that a broad application field,
especially in the automobile industry about 6 - 8 years requires lead time. Therefore necessary to
restrict the use of cobalt salts long transition periods and a general exception for the use for the
manufacture of components of existing series, as indeed it was also granted in the ELV
regulation.
The HSO Herbert Schmidt GmbH & amp; Co. KG requested an exemption for the use of cobalt
salts (cobalt (II) dinitrate, cobalt dichloride, cobalt (II) sulfate, cobalt (II) diacetate, Cobalt (II)
carbonate) solutions in the production of conversion layers in case of intake of these substances
in Annex XIV of the REACH regulation.
The use of chromium trioxide / chromic acid for the purpose of chromate of zinc, zinc-alloy layers
and the production of conversion layers on light metals should be for a transitional period of
about 10 years for special applications (eg aviation, military equipment, spare parts for the
automotive industry, optical industry) of the authorization requirement in the case of absorption
of these substances are released into Annex XIV of the REACH Regulation.
of these substances are released into Annex XIV of the REACH Regulation.



575	2011/09/01 13:44	Umicore NV/SA BehalfOfAnOrg anisation Company Belgium	According to REACH Title 1, Chapter 1, Article 2, 8b all intermediate uses are exempted from Authorisation. We are therefore of the opinion that all supported uses to which PC19 is assigned (cfr. registration dossier) should be specifically listed as being exempted in the recommendation for prioritisation of ECHA.
566	2011/08/30 21:56 File attached	Cobalt REACH Consortium Ltd (CoRC) BehalfOfAnOrg anisation Industry or trade association United Kingdom	Use of cobalt dinitrate as an intermediate to manufacture other chemicals is exempt (REACH Title 1, Chapter 1, Article 2, 8b). Specific uses considered as intermediates are listed below: -Manufacture of cobalt dinitrate. -Use of cobalt dinitrate in the manufacture of cobalt carboxylates and resinates (intermediate use). -Manufacture of cobalt dinitrate as an intermediate during catalyst manufacture. -Industrial use of cobalt dinitrate as an intermediate in the manufacture of other cobalt containing compounds during catalyst production. -Industrial use of cobalt dinitrate in surface treatment processes (intermediate use). -Manufacture of batteries using cobalt dinitrate (intermediate use). -Industrial use of cobalt dinitrate in the manufacture of chemicals and in other wet-chemical processes as intermediate.



539	2011/08/19 16:32 File attached <mark>Confidential</mark>	European Catalyst Manufacturer's Association (ECMA)	The use of Cobalt dinitrate as intermediate for the manufacture of other cobalt compounds in the catalyst industry is exempted from authorisation according to Article 2.8. (b) of Regulation (EC 1907/2006).
		BehalfOfAnOrg anisation Industry or trade association Belgium	



## **IV - C**OMMENTS ON USES FOR WHICH REVIEW PERIODS SHOULD BE INCLUDED IN ANNEX XIV, INCLUDING REASONS FOR THAT:

#	Date (Attachment provided	Submitted by (name, Organisation/ MSCA)	Comment
1807	2011/09/14 20:51 File attached	ACEA - European Automobile Manufacturers Association	See attachment.
		BehalfOfAnOrg anisation Industry or trade association Belgium	
1744	2011/09/14 18:41	The Cobalt Development Institute BehalfOfAnOrg anisation Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt diacetate in Annex XIV of REACH (submitted September 2011)



1853	2011/09/14 18:41 File attached	The Cobalt Development Institute BehalfOfAnOrg anisation Industry or trade association United Kingdom	Please refer to the following document for technical details: 1) final Joint Response Comments (JRC) on the five cobalt salts that were submitted into the present ECHA stakeholder consultation on Tuesday 30 August 2011 2) Technical Annex to the Cobalt Reach Consortium's (CoRC) Joint Response to ECHA's Consultation on the Proposed Inclusion of cobalt diacetate in Annex XIV of REACH (submitted September 2011)
1653	2011/09/14 16:21	PortugalPortug uese Environment Agency MemberState	<div></div>
		Portugal	
1545	2011/09/14 14:20	Enthone GmbH	See attached
	File attached	BehalfOfAnOrg anisation Company United Kingdom	



925	2011/09/13 13:09	Dr. Kubitz GmbH BehalfOfAnOrg anisation	Use in electrolytes for the deposition of cobalt layers intended as scale for magnetic measurements of distances and angles.
		Company Germany	
741	2011/09/12 11:16	BehalfOfAnOrg anisation Company France	Use as substance for passivation process in automotive application.
566	2011/08/30 21:56 File attached	Cobalt REACH Consortium Ltd (CoRC) BehalfOfAnOrg anisation Industry or trade association United Kingdom	We acknowledge that ECHA have not proposed review periods for any uses during this prioritisation. Any review period would need to be developed based on a full understanding on the supply/value chain for cobalt dinitrate. Such an understanding is not available at present and would only be possible given sufficient time investigate the supply/value chain further. We would urge ECHA not to set review periods until suitable robust data are available.