

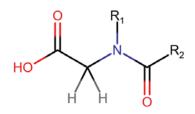
Assessment of regulatory needs

Authority: European Chemicals Agency (ECHA)

Date: 27.07.2022

Group Name: Acyl glycinates and sarcosinates

General structure:



Revision history

Version	Date	Description
1.0	27.07.2022	

EC/List number	CAS number	Substance name Chemical structures		Registration type (full, OSII or TII, NONS), highest tonnage band among all the registrations (t/y) ¹
202-608-3	97-78-9	N-lauroylsarcosine		Full, 100-1000
203-749-3	110-25-8	(Z)-N-methyl-N-(1-oxo-9- octadecenyl)glycine	O CH3	Not Registered
205-281-5	137-16-6	sodium N-lauroylsarcosinate		Full, >1000
205-539-7	142-48-3	N-(1-oxooctadecyl)sarcosine		Not Registered
208-839-6	543-24-8	N-acetylglycine	H ₃ C H OH	Not Registered

Substances within this group:

¹ n/a: not publicly available

222-829-9	3624-77-9	sodium N-methyl-N-(1-oxo-9- octadecenyl)aminoacetate		Full, 100-1000
238-122-3	14246-53-8	N-(1-oxooctyl)glycine	H ₁ C	Full, 10-100
240-166-3	16026-16-7	calcium bis[(Z)-N-methyl-N-(1- oxo-9- octadecenyl)aminoacetate]		Full, not (publicly) available
241-727-5	17736-08-2	(Z)-N-methyl-N-(1-oxo-9- octadecenyl)glycine, compound with 2,2',2''-nitrilotri(ethanol) (1:1)		Full, 1-10
250-151-3	30364-51-3	sodium N-methyl-N-(1- oxotetradecyl)aminoacetate		Full, 10-100
258-007-1	52558-73-3	N-(1-oxotetradecyl)sarcosine		Full, not (publicly) available

				Full, 10-100
263-193-2	61791-59-1	Glycine, N-methyl-, N-coco acyl derivs., sodium salts		
268-130-2	68003-46-3	ammonium N-methyl-N-(1- oxododecyl)glycinate	NH("	Full, not (publicly) available
270-156-4	68411-97-2	Glycine, N-methyl-, N-coco acyl derivs.		Full, not (publicly) available
278-503-1	76622-74-7	potassium (Z)-N-methyl-N-(1- oxo-9-octadecenyl)aminoacetate	H,c ⁻¹ Oi	Full, not (publicly) available
291-350-5	90387-74-9	Glycine, N-coco acyl derivs., sodium salts	**	Full, not (publicly) available
427-430-5	54301-26-7	(undec-10-enoylamino)acetic acid	H,C	Full, 10-100

440-990-5	230309-38- 3	Glycine, N-methyl-N-(1- oxododecyl)-, 1-methylethyl ester		Full, not (publicly) available
470-270-6	477773-67- 4	Glycine, N, N' - (1,9-nonandeiyl) bis-, monopotasium salt	«گرنې	Full, not (publicly) available
620-582-5	301341-58- 2	Fatty acids, coco derivs., reaction products with glycine, potassium salts	i	Full, not (publicly) available
627-023-4	2441-41-0	N-Palmitoylglycine		Full, 1-10
695-735-2	68489-14-5	ethyl N-{[(1R,2S,5R)-2- isopropyl-5- methylcyclohexyl]carbonyl}glyci nate	H ₃ C CH ₃ CH ₃	Full, not (publicly) available
696-514-3	18777-32-7	sodium (dodecanoylamino)acetate	alexandrations	Not Registered

701-177-3		N-methyl-N-(C18- (unsaturated)alkanoyl)glycine	ir Contr	Full, not (publicly) available
938-147-6		Fatty acid chlorides, C8-14 (even numbered), reaction products with glycine		Full, 100-1000
940-223-9		Reaction products of fatty acid chlorides, C8-12 (even numbered) with glycine and sodium hydroxide	ir	Full, 100-1000
942-063-5		Fatty acids, coco derivs. II, reaction products with glycine, potassium salts	-1/1z	Full, not (publicly) available
943-406-1		C8-18 (even numbered) and C18-unsaturated sarcosinates, 2-hydroxypropylammonium salts		Full, not (publicly) available
Not (publicly) available	-	Calcium salts of fatty acids	muuntar cound muuntar cound	Full, not (publicly) available

			Full, 100-1000
947-850-7	Reaction mass of stearoyl sarcosine and palmitoyl sarcosine	H ₃ C H	

This table contains also group members that are only notified under the CLP Regulation. However, the list is currently non-exhaustive. Should further regulatory risk management action on one or more substances in the group be considered, ECHA will make an additional search for related C&L notified substances to be included in the group and develop an assessment of regulatory needs for them.

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The author does not accept any liability with regard to the use that may be made of the information contained in this document. Usage of the information remains under the sole responsibility of the user. Statements made or information contained in the document are without prejudice to any further regulatory work that ECHA, the Member States or other regulatory agencies may initiate at a later stage. Assessment of regulatory needs and their conclusions are compiled on the basis of available information and may change in light of newly available information or further assessment.

Foreword

The purpose of the assessment of regulatory needs of a group of substances is to help authorities conclude on the most appropriate way to address the identified concerns for a group of substances or a single substance, i.e. the combination of the regulatory risk management instruments to be used and any intermediate steps, such as data generation, needed to initiate and introduce these regulatory measures.

An assessment of regulatory needs can conclude that regulatory risk management at EU level is required for a (group of) substance(s) (e.g. harmonised classification and labelling, Candidate List inclusion, restriction, other EU legislation) or that no regulatory action is required at EU level. While the assessment is done for a group of substances, the (no) need for regulatory action can be identified for the whole group, a subgroup or for single substance(s).

The assessment of regulatory needs is an important step under ECHA's Integrated Regulatory Strategy. However, it is not part of the formal processes defined in the legislation but aims to support them.

The assessment of regulatory needs can be applied to any group of substances or single substance, i.e., any type of hazards or uses and regardless of the previous regulatory history or lack of such. It can be done based on different level of information. A Member State or ECHA can carry out this case-by-case analysis. The starting point is available information in the REACH registrations and any other REACH and CLP information. However, more extensive set of information can be available, e.g. assessment done under REACH/CLP or other EU legislation, or can be generated in some cases (e.g. further hazard information under dossier evaluation). Uncertainties associated to the level of information used should be reflected in the documentation. It will be revisited when necessary. For example, after further information is generated and the hazard has been clarified or when new insights on uses are available. It can be revisited by the same or another authority.

The responsibility for the content of this assessment rests with the authority that developed it. It is possible that other authorities do not have the same view and may develop further assessment of regulatory needs. The assessment of regulatory needs does not yet initiate any regulatory process but any authority can consequently do so and should indicate this by appropriate means, such as the Registry of Intentions.

For more information on Assessment of regulatory needs please consult ECHA website².

² https://echa.europa.eu/understanding-assessment-regulatory-needs

Glossary

ССН	Compliance Check
CLH	Harmonised classification and labelling
CMR	Carcinogenic, mutagenic and/or toxic to reproduction
DEv	Dossier evaluation
ED	Endocrine disruptor
NONS	Notified new substances
OEL	Occupational exposure limit
OSII or TII	On-site isolated intermediate or transported isolated intermediate
PBT/vPvB	Persistent, bioaccumulative and toxic/very persistent and very bioaccumulative
RMOA	Regulatory management options analysis
RRM	Regulatory risk management
SEv	Substance evaluation
STOT RE	Specific target organ toxicity, repeated exposure
SVHC	Substance of very high concern

1 Overview of the group

ECHA has grouped together 30 structurally similar derivatives of amino acids sarcosine and glycine. The carboxylate can be available as an acid or a salt, e.g. acyl glycinates and sarcosinates. Additionally, two esters are present in the group. The following generic chemical structure represents the substances in the group:



Where $R_1=H \rightarrow acyl$ glycinates or $R_1=CH_3 \rightarrow acyl$ sarcosinates and R_2 can be any aliphatic hydrocarbon group. The linear alkyl carbon chain (with exception of one cyclic hydrocarbon) varies in length from C2 to C18 and a degree of saturation.

Based on the information retrieved from 26 registration dossiers, all substance types are present in the group: 12 mono-constituent, 1 multi-constituent and 13 UVCB substances. Four other substances retrieved via read across are C&L notifications.

Based on information reported in the REACH registration dossiers, the substances in the group are used as surfactants, cleaning and maintenance products or lubricating agents in a wide variety of uses, in particular in cosmetics, washing and cleaning, polishes and waxes, lubricants or surface treatment. All substances in the group are used by professional workers and/or consumers, or might substitute the other substances in such uses. According to registration information, few of the substances may end up in textile, leather or polymer articles. Further details are presented in the tables in Annex 2. Overall, it can be concluded that there is a high potential for exposure to the substances in this group.

Note on the scope of ECHA's assessment of regulatory needs

Regarding hazards, the focus of ECHA's assessment is on CMR (carcinogenic, mutagenic and/or toxic to reproduction), sensitiser, ED (endocrine disruptor), PBT/vPvB or equivalent (e.g. substances being persistent, mobile and toxic), aquatic toxicity hazard endpoints and therefore only those are reflected in the table in section 3. This does not mean that the substances do not have other known or potential hazards. In some specific cases, where ECHA identifies a need for regulatory risk management action at EU level for other hazards (e.g. neurotoxicity, STOT RE), such additional hazards may be addressed in the assessment. An overview of classification is presented in Annex 1.

On the exposure side, ECHA is mainly using the information on uses reported in the registration dossiers (IUCLID) as a proxy for assessing the potential for exposure to humans and releases to the environment. The potential for release / exposure is generally considered high for "widespread" uses, i.e. professional and consumer uses and uses in articles. For these uses, normally happening at many places, the expected level of control is *à priori* considered limited. The chemical safety reports are not necessarily consulted and no quantitative exposure assessment is performed at this stage.

2 Justification for the no need for regulatory risk management action at EU level

Based on currently available information, there is no need for EU regulatory risk management for all substances in the group.

Based on ECHA's assessment of currently available hazard information, no potential hazards were identified for human health. These conclusions are based on available experimental data for mutagenicity, skin sensitisation, repeated dose toxicity and reproductive toxicity.

The substances in this (sub)group are unlikely to fulfil the PBT/vPvB screening criteria, because they have low potential for bioaccumulation, do not fulfil the T criterion and are likely inherently biodegradable.

Some of the substances in the group show aquatic toxicity and a number of group members are classified for aquatic hazards. However, as mostly all the substances are expected to be readily biodegradable (only one substance screened as potential P, EC 427-430-5) and not to be bioaccumulative, ECHA concluded that there would not be the need for further EU regulatory risk management for this hazard. The substances in this group have common functional groups and similar uses, supporting their similarity. The main chemical difference from the hazard point of view is the distribution of alkyl chain length. From the currently available information no outliers have been identified and therefore all substances are expected to have similar (eco)toxicological profile by extrapolation of the available data to the similar ones.

In addition, there is no expected impact from differences in impurity profiles that would affect the (eco)toxicological profile for the substances in the group in terms of CMR, ED or PBT/vPvB properties.

It has to be noted that although the substances as such do not have carcinogenic potential, the formation of carcinogenic nitrosamines cannot be excluded. Therefore, provisionally, a concern for carcinogenicity is identified that is related to the use of each substance and potential presence of nitrosating agents that can result in the formation of carcinogenic nitrosamines.

The potential of all the substances in the group to react with nitrosating agents and to form potential carcinogenic nitrosamines has not been explored further in terms of actions. A common approach needs to be developed further regarding substances with a potential to form nitrosamines as part of co-exposure with nitrosating agents, and the subsequent regulatory measures where relevant. This is a more generic topic that is of relevance also for other groups of substances.

There are uncertainties around reproductive toxicity, aquatic toxicity and persistency for some of the substances in the group. Therefore, while based on the available information, it is still assumed that the potential hazards would not lead to any classification or need for EU RRM, this would need to be confirmed via ongoing and proposed data generation via TPE (List 701-177-3) and CCH (proposed for EC 205-281-5, EC 291-350-5, List 427-430-5, List 440-990-5, List 620-582-5, List 942-063-5).

3 Conclusions and actions

The conclusions and actions proposed in the table below are based on the REACH and CLP information available at the time of the assessment by ECHA. The main source of information is the registration dossiers. Relevant public assessments may also be considered. When new information (e.g. on hazards through evaluation processes, or on uses) will become available, the document will be updated and conclusions and actions revisited.

EC/List number	Human Health Hazard	Environmental Hazard	Relevant use(s) & exposure potential	Last foreseen action	Action
EC/List number	No hazard or unlikely hazard	Known or potential hazard	High potential for exposure to	Currently no need for EU RRM	- Wait for ongoing TPE or initiate CCH
202-608-3	Choose an item.	for aquatic toxicity	professional workers		for representative
203-749-3			and consumers from widespread uses, e.g.	Justification:	substances
205-281-5			in washing and cleaning, cosmetics,	No hazard or unlikely hazard for	
205-539-7			lubricants or surface	environment and	
208-839-6			treatment. For some substances	human health, to be clarified by CCH	
222-829-9			exposure is also possible from articles,		
238-122-3			e.g. textile, leather		
240-166-3			and polymeric articles.		
241-727-5					
250-151-3					
258-007-1					
263-193-2					

268-130-2			
270-156-4			
278-503-1			
291-350-5			
427-430-5			
440-990-5			
470-270-6			
620-582-5			
627-023-4			
695-735-2			
696-514-3			
701-177-3			
938-147-6			
940-223-9			
942-063-5			
943-406-1			
EC not (publicly) available (Calcium salts of fatty acids)			
947-850-7			

Annex 1: Harmonised and self-classifications

Data extracted on 03.02.2022

EC/ List No	CAS No	Substance name	Harmonised classification	Classification in registrations	Classification in C&L notifications (*)
202- 608- 3	97- 78-9	N- lauroylsarcosi ne	-	Acute Tox. 2 H330, specific concentration: >34.5 Skin Irrit. 2 H315, specific concentration: >30 Skin Irrit. 2 H315 Eye Damage 1 H318, specific concentration: >30 Eye Damage 1 H318	Acute Tox. 2 H330[1 out of 5] STOT Single Exp. 3 H335, affected organs: [1 out of 5] Eye Irrit. 2 H319[2 out of 5]
205- 281- 5	137- 16-6	sodium N- lauroylsarcosi nate	-	Acute Tox. 2 H330, specific concentration: >34.5 Skin Irrit. 2 H315, specific concentration: >30 Eye Damage 1 H318, specific concentration: >30	Acute Tox. 3 H331[1 out of 66] Acute Tox. 4 H332[1 out of 66] Eye Damage 1 H318[35 out of 66] Eye Irrit. 2 H319[6 out of 66] Acute Tox. 2 H330[27 out of 66] Skin Irrit. 2 H315, specific concentration: >=30[1 out of 66] Skin Irrit. 2 H315[34 out of 66]
222- 829- 9	3624 -77- 9	sodium N- methyl-N-(1- oxo-9- octadecenyl)a minoacetate	-	Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Damage 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 3 H412	Aquatic Chronic 1 H410[3 out of 11] Eye Irrit. 2 H319[4 out of 11]
238- 122- 3	1424 6- 53-8	N-(1- oxooctyl)glyci ne	-	Eye Damage 1 H318, specific concentration: >=5	STOT Single Exp. 3 H335, affected organs: respiratory tract[1 out of 6] Eye Irrit. 2 H319[1 out of 6] Eye Damage 1 H318[3 out of 6] Skin Irrit. 2 H315[1 out of 6]
240- 166- 3	1602 6- 16-7	calcium bis[(Z)-N- methyl-N-(1- oxo-9-	-	Skin Irrit. 2 H315 Eye Irrit. 2 H319	Aquatic Acute 1 H400[2 out of 2] Aquatic Chronic 1 H410[2 out of 2]

		octadecenyl)a		Aquatic Chronic 2	Eye Damage 1 H318[2
		minoacetate]		H411	out of 2]
241- 727- 5	1773 6- 08-2	(Z)-N-methyl- N-(1-oxo-9- octadecenyl)gl ycine, compound with 2,2',2"- nitrilotri(ethan ol) (1:1)	-	Skin Irrit. 2 H315 Eye Damage 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 3 H412	Eye Irrit. 2 H319[1 out of 10] Aquatic Chronic 1 H410[1 out of 10]
250- 151- 3	3036 4- 51-3	sodium N- methyl-N-(1- oxotetradecyl) aminoacetate	-	Skin Irrit. 2 H315, specific concentration: >=30 Eye Damage 1 H318	Acute Tox. 2 H330[4 out of 6] Skin Irrit. 2 H315[4 out of 6]
258- 007- 1	5255 8- 73-3	N-(1- oxotetradecyl) sarcosine	-	Skin Corr. 1B H314 Eye Damage 1 H318	STOT Single Exp. 3 H335, affected organs: Respiratory tract[1 out of 2] Skin Irrit. 2 H315[1 out of 2] Skin Corr. 1C H314[1 out of 2]
263- 193- 2	6179 1- 59-1	Glycine, N- methyl-, N- coco acyl derivs., sodium salts	-	Skin Irrit. 2 H315, specific concentration: >30 Eye Damage 1 H318, specific concentration: >30	Eye Damage 1 H318[1 out of 5] Skin Irrit. 2 H315[2 out of 5] Eye Irrit. 2 H319[3 out of 5]
268- 130- 2	6800 3- 46-3	ammonium N- methyl-N-(1- oxododecyl)gl ycinate	-	Eye Damage 1 H318	-
270- 156- 4	6841 1- 97-2	Glycine, N- methyl-, N- coco acyl derivs.	-	Skin Corr. 1B H314 Eye Damage 1 H318	-
278- 503- 1	7662 2- 74-7	potassium (Z)-N-methyl- N-(1-oxo-9- octadecenyl)a minoacetate	-	Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Damage 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 3 H412	-
291- 350- 5	9038 7- 74-9	Glycine, N- coco acyl derivs., sodium salts	-	-	Eye Irrit. 2 H319[6 out of 11] Eye Damage 1 H318[4 out of 11] Skin Irrit. 2 H315[5 out of 11]
427- 430- 5	5430 1- 26-7	(undec-10- enoylamino)ac etic acid	-	Eye Damage 1 H318 Aquatic Chronic 3 H412	-

440- 990- 5	2303 09- 38-3	Glycine, N- methyl-N-(1- oxododecyl)-, 1-methylethyl ester	-	-	-
470- 270- 6		Glycine, N, N' - (1,9- nonandeiyl) bis-, monopotasium salt	-	-	-
620- 582- 5	3013 41- 58-2	Fatty acids, coco derivs., reaction products with glycine, potassium salts	-	-	-
627- 023- 4	2441 -41- 0	N- Palmitoylglyci ne	-	-	-
695- 735- 2	6848 9- 14-5	ethyl N- {[(1R,2S,5R)- 2-isopropyl-5- methylcyclohe xyl]carbonyl}g lycinate	-	Aquatic Chronic 2 H411	Eye Irrit. 2 H319[3 out of 4]
701- 177- 3		N-methyl-N- (C18- (unsaturated) alkanoyl)glyci ne	-	Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Damage 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 3 H412	-
938- 147- 6		Fatty acid chlorides, C8- 14 (even numbered), reaction products with glycine	-	Eye Damage 1 H318	-
940- 223- 9		Reaction products of fatty acid chlorides, C8- 12 (even numbered) with glycine and sodium hydroxide	-	Eye Damage 1 H318, specific concentration: >=30-<=100	-
942- 063- 5		Fatty acids, coco derivs. II, reaction products with glycine,	-	-	-

	potassium salts			
943- 406- 1	C8-18 (even numbered) and C18- unsaturated sarcosinates, 2- hydroxypropyl ammonium salts	-	Skin Corr. 1B H314 Eye Irrit. 2 H319	-
Not (publ icly) avail able	Calcium salts of fatty acids	-	-	-
947- 850- 7	Reaction mass of stearoyl sarcosine and palmitoyl sarcosine	-	Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Damage 1 H318 Aquatic Acute 1 H400 Aquatic Chronic 3 H412	-

(*) the number in brackets indicates the number of notifications received. Each notification can represent a group of notifiers, therefore the number may differ from the C&L inventory which displays number of notifiers.

Annex 2: Overview of uses based on information available in registration dossiers

Data extracted on 5 November 2021

Main types of applications structured by product or article types	EC/List 250- 151-3	EC/List 258- 007-1	EC/List 263- 193-2	EC/List 268- 130-2	EC/List 270- 156-4	EC/List 291- 350-5	EC/List 427- 430-5	EC/List 620- 582-5	EC/List 701- 177-3	EC/List 938- 147-6	EC/List 940- 223-9	EC/List 942- 063-5	EC/List 947- 850-7
Water treatment chemicals									F, P				
Explosives									Р				
Fertilisers									С				
Plant protection products	P , C		P , C		P , C				С				
Anti-freeze and de-icing products									Ρ, C				
Washing and cleaning products	F, I, P , C	F, I, P , C	F, I, P , C	F, I, P , C	F, I, P , C	F, I, P , C		F, I, P , C	F, I, P , C	F, <mark>C</mark>	F, C	F, I, P , C	F, I, P , C
Biocidal products (e.g. disinfectants, pest control)	С	С	С	С	С				С				С
Perfumes, fragrances			F, P , C						С				
Air care products	С	С	С	С	С								С
Cosmetics, personal care products	F, P , C	F, P , C	F, P , C	F, P , C	F, P , C	F, P , C	F, C	F, C	F, P , C	F, P , C			
Pharmaceuticals			F, C										
Polishes and wax blends	P, C	P , C	P, C	P, C	P, C				P, C				P , C
Non-metal-surface treatment products									С				
Lubricants, greases, release products	F, I, P , C		F, I, P , C		F, I, P , C				F, I, P , C				Ι

Metal working fluids									I, P , C			
Heat transfer fluids									С			
Hydraulic fluids									I, P , C			
Fuels	F		F		F				I, P , C			
Polymer preparations and compounds	F		F		F				F, I, P			F, I, A
Adhesives, sealants	F, I, P , C		F, I, P , C		F, I, P , C				С			
Finger paint	С		С		С				С			
Fillers, putties, plasters, modelling clay	P, C		Ρ, C		P, C				С			
Coatings and paints, thinners, paint removes	F, I, P , C		F, I, P , C		F, I, P , C				F, I, P , C			I
Ink and toners	F, I, P		F, I, P		F, I, P	F, I, P , C		F, I, P , C	F, I, P		F, I, P , C	
Paper and board treatment products						F, I, P , C		F, I, P , C			F, I, P , C	
Textile dyes, and impregnating products						F, I, P , C		F, I, P , C	I, C , A		F, I, P , C	I, A
Leather treatment products						F, I, P , C		F, I, P , C	I, C		F, I, P , C	Ι
Metal surface treatment products	Ι	I	I	I	I				I			Ι
Intermediate	I	I	I	I	I		I		I			I

F: formulation, I: industrial use, P: professional use, C: consumer use, A: article service life; P, C and A are highlighted in red to indicate widespread use with potential for exposure/release

Main types of applications structured by product or article types	EC/List 238- 122-3	EC/List 440- 990-5	EC/List 470- 270-6	EC/List 943- 406-1	EC/List 627- 023-4	EC/List 695- 735-2	EC/List 202- 608-3	EC/List 205- 281-5	EC/List 222- 829-9	EC/List 240- 166-3	EC/List 241- 727-5	EC/List 278- 503-1	Calcium salts of fatty acids
Products such as ph-regulators, flocculants, precipitants, neutralisation agents	F, I, P							I, P					
Plant protection products								I, P , C					
Washing and cleaning products	F, I, P , C	I				I, P , C	I, P , C	F, I, P , C	I, P , C				
Biocidal products (e.g. disinfectants, pest control)						С		F, I, P , C					
Perfumes, fragrances	F, I, P , C					С		F, I, C					
Air care products						С		F, I, P , C					
Cosmetics, personal care products	F, I, P , C	F, P , C	F, P , C	F, P , C	F, P , C	С	F, I, <mark>C</mark>	F, I, P , C	F, I, <mark>C</mark>				
Pharmaceuticals	F, I, P , C												
Polishes and wax blends		F, I, P , C				Р, С		F, I, P , C					
Non-metal-surface treatment products							I	F, I, P	Ι		I	F, I	
Lubricants, greases, release products		F, I, P , C					F, I, P , C	F, I, P , C	F, I, P , C	F, I, P , C		F, I	F, I
Metal working fluids		F, I, P , C					F, I, P	F, I, P	F, I, P				F, I
Hydraulic fluids								I, P					I
Polymer preparations and compounds												F, I	
Adhesives, sealants								С					

Coatings and paints, thinners, paint removes						F, I, P , C				
Ink and toners	F, I, P C	I				F, I, P				
Paper and board treatment products	F, I, P C	1							F, I	
Textile dyes, and impregnating products	F, I, P C	I			F, I, P , C	I, A	F, I, P , C	F, I, A	F, I, A	
Leather treatment products	F, I, P C	I			F, I, P , C	I	F, I, P , C		F, I, A	
Metal surface treatment products					I	I	I			
Intermediate				I	F, I	F, I				

F: formulation, I: industrial use, P: professional use, C: consumer use, A: article service life; P, C and A are highlighted in red to indicate widespread use with potential for exposure/release

Annex 3: Overview of completed or ongoing regulatory risk management activities

Data extracted on 09/11/2021.

There are no relevant completed or ongoing regulatory risk management activities for any of the substances.