

Helsinki, 12 June 2023

Addressee

Registrant of JS_290-844-8 as listed in Appendix 3 of this decision

Date of submission of the dossier subject to this decision

07/06/2022

Registered substance subject to this decision ("the Substance")

Substance name: Butanedioic acid, sulfo-, monoesters with lanolin alcs., disodium salts
EC number: 290-844-8

Decision number: Please refer to the REACH-IT message which delivered this communication (in format CCH-D-XXXXXXXXXX-XX-XX/F)

DECISION ON A COMPLIANCE CHECK

Under Article 41 of Regulation (EC) No 1907/2006 (REACH), you must submit the information listed below by **19 December 2025**.

Requested information must be generated using the Substance unless otherwise specified.

Information required from all the Registrants subject to Annex VII of REACH

1. Water solubility (Annex VII, Section 7.7.; test method: EU A.6./OECD TG 105, the Flask method);
2. In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.; test method: OECD TG 471, 2020);
3. If the information on water solubility of the Substance or any of its constituents (results of request 1) show a water solubility above 1 mg/L: Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.; test method: EU C.2./OECD TG 202);
4. If the information on water solubility of the Substance or any of its constituents (results of request 1) show a water solubility below 1 mg/L: Long-term toxicity testing on aquatic invertebrates (triggered by Annex VII, Section 9.1.1., column 2; test method: EU C.20./OECD TG 211);
5. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.; test method: EU C.3./OECD TG 201).

Information required from all the Registrants subject to Annex VIII of REACH

6. In vitro micronucleus study (Annex VIII, Section 8.4.2., test method: OECD TG 487). The aneugenic potential of the Substance must be assessed with an additional control group for aneugenicity on top of the control group for clastogenicity, if the Substance induces an increase in the frequency of micronuclei.);
7. If negative results are obtained in tests performed for the information requirements of Annex VII, Section 8.4.1. and Annex VIII, Section 8.4.2. then: In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.; test method: OECD TG 476 or TG 490);

8. Short-term repeated dose toxicity (28 days; Annex VIII, Section 8.6.1.) to be combined with the Screening for reproductive/developmental toxicity below;
9. Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.; test method: EU B.64/OECD TG 422) by oral route, in rats;
10. If the information on water solubility of the Substance or any of the constituents of the Substance (results of request 1) show a water solubility above 1 mg/L: Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.; test method: EU C.1./OECD TG 203);
11. If the information on water solubility of the Substance or any of the constituents of the Substance (results of request 1) show a water solubility below 1 mg/L: Long-term toxicity testing on fish (triggered by Annex VIII, Section 9.1.3., column 2; test method: EU C.47./OECD TG 210).

The reasons for the decision(s) are explained in Appendix 1.

How to comply with your information requirements

To comply with your information requirements, you must submit the information requested by this decision in an updated registration dossier by the deadline indicated above. You must also **update the chemical safety report, where** relevant, including any changes to classification and labelling, based on the newly generated information.

You must follow the general requirements for testing and reporting new tests under REACH, see Appendix 4.

Appeal

This decision, when adopted under Article 51 of REACH, may be appealed to the Board of Appeal of ECHA within three months of its notification to you. Please refer to <http://echa.europa.eu/regulations/appeals> for further information.

Failure to comply

If you do not comply with the information required by this decision by the deadline indicated above, ECHA will notify the enforcement authorities of your Member State.

Authorised¹ under the authority of Mike Rasenberg, Director of Hazard Assessment

Appendix 1: Reasons for the request(s)

Appendix 2: Procedure

Appendix 3: Addressees of the decision and their individual information requirements

Appendix 4: Conducting and reporting new tests under REACH

¹ As this is an electronic document, it is not physically signed. This communication has been approved according to ECHA's internal decision-approval process.

Appendix 1: Reasons for the request(s)**Contents**

0. Reasons common to several requests	4
Reasons related to the information under Annex VII of REACH.....	8
1. Water solubility (Annex VII, Section 7.7.).....	8
2. In vitro gene mutation study in bacteria.....	9
3. Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1., Column 1) (if the results of request 1 showed a water solubility above 1 mg/L)	9
4. Long-term toxicity testing on aquatic invertebrates (triggered by Annex VII, Section 9.1.1., Column 2): (if the results of request 1 showed a water solubility below 1 mg/L)	11
5. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)	12
Reasons related to the information under Annex VIII of REACH	15
6. In vitro cytogenicity study in mammalian cells or In vitro micronucleus study	15
7. In vitro gene mutation study in mammalian cells	16
8. Short-term repeated dose toxicity (28 days).....	16
9. Screening for reproductive/developmental toxicity	20
10. Short-term toxicity testing on fish (Annex VIII, Section 9.1.3., Column 1) (if the results of request 1 showed a water solubility above 1 mg/L)	21
11. Long-term toxicity testing on fish (triggered by Annex VIII, Section 9.1.3., Column 2): if the results of request 1 showed a water solubility below 1 mg/L).....	22
References	24

0. Reasons common to several requests

0.1. Read-across adaptation rejected

1 You have adapted the following standard information requirements by using grouping and read-across approach under Annex XI, Section 1.5:

- In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.);
- In vitro cytogenicity study in mammalian cells or in vitro micronucleus study (Annex VIII, Section 8.4.2.);
- In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.);
- Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.).

2 ECHA has considered the scientific and regulatory validity of your read-across approach(es) in general before assessing the specific standard information requirements in the following sections.

3 Annex XI, Section 1.5. specifies two conditions which must be fulfilled whenever a read-across approach is used.

4 Firstly, there needs to be structural similarity between substances which results in a likelihood that the substances have similar physicochemical, toxicological and ecotoxicological properties so that the substances may be considered as a group or category.

5 Secondly, it is required that the relevant properties of a substance within the group may be predicted from data for reference substance(s) within the group.

6 Additional information on what is necessary when justifying a read-across approach can be found in the Guidance on IRs and CSA, Chapter R.6. and related documents (RAAF, 2017; RAAF UVCB, 2017).

0.1.1. Predictions for toxicological properties

7 You predict the properties of the Substance from information obtained from the following source substance(s):

- Dioctyl sodium sulfosuccinate (no identifiers provided);
- Lanolin alcohols (no identifiers provided);
- Cholesterol (EC No 200-353-2);
- Lanolin fatty acids (no identifiers provided);
- Lanolin (no identifiers provided).

8 You provide the following reasoning for the prediction of toxicological properties:

9 For Genotoxicity: "*Sulfosuccinate of Lanoline Alcohol is chemically a complex substance. Several genetic studies on Lanoline Alcohol (AMES, Chromosome Aberration and Mouse lymphoma assay) indicated no genetic toxicity for this portion of the molecule. Furthermore, for the Sulfosuccinic part no genetic toxicity studies are available, however the evidence of non-carcinogenicity property was assessed in rats (section 7.7).*"

- 10 For toxicity to reproduction: *"This three-generation study gives significant information on the Sulfosuccinic part of the registering substance (represented in the study by Dioctyl Sodium Sulfosuccinate)."*
- 11 ECHA understands that your read-across hypothesis assumes that different compounds have the same type of effects. You predict the properties of your Substance to be quantitatively equal to those of the source substance.
- 12 We have identified the following issue(s) with the prediction(s) of toxicological properties:
- 0.1.1.1. *Missing supporting information to compare the properties of the substances*
- 13 Annex XI, Section 1.5 requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must provide supporting information to scientifically justify the read-across explanation for prediction of properties. The set of supporting information should strengthen the rationale for the read-across in allowing to verify the crucial aspects of the read-across hypothesis and establishing that the properties of the Substance can be predicted from the data on the source substance(s) (Guidance on IRs and CSA R.6, Section R.6.2.2.1.f.).
- 14 Supporting information must include bridging studies to compare properties of the source substances information to confirm your prediction.
- 15 As indicated above, your read-across hypothesis is based on the assumption that the structurally similar source substance(s) cause the same type of effect(s).
- 16 In this context, relevant, reliable and adequate information allowing to compare the properties of the source substance(s) is necessary to confirm that the substances cause the same type of effects. Such information can be obtained, for example, from bridging studies of comparable design and duration for the Substance and of the source substance(s).
- 17 Specific reasons why the source studies cannot be considered reliable are explained below.
- 18 With respect to the Screening for reproductive/developmental toxicity:
- 19 You provide the study used in the prediction - a three-generation study with the source substance dioctyl sodium sulfosuccinate.
- 20 In addition, to support your claim of absence of reproductive and developmental toxicity for the Substance you refer to human data on first trimester drug use of Dioctyl sodium sulfosuccinate (source substance).
- 21 With regard to the human data on Dioctyl sodium sulfosuccinate:
- i. The publication investigated the prevalence of certain major congenital disorders among live-born infants of mothers in a prepaid health plan. It lists Dioctyl sodium sulphosuccinate as one of the drugs investigated. However, this is a prospective study which lacks a control group.
 - ii. The study is an association study with no information on the actual exposure. The subjects were identified based on whether they were prescribed a drug. There is no information on whether the subjects followed the prescription or which doses were administered.
 - iii. The study only covers the first trimester drug use of Dioctyl sodium sulfosuccinate. There is a bias in the study design of this study design which severely limits the usability of the study to support the read-across for reproductive toxicity. The study has only investigated live-born infants, i.e. it does not consider potential developmental toxicity effects which may have caused abortions. Furthermore, the

study does not cover exposure during the second and third trimester. In addition, the study does not at all cover fertility aspects and events occurring before implantation.

- 22 Based on the above ECHA consider this study as not reliable.
- 23 Apart from these source studies, your read-across justification or the registration dossier does not include any robust study summaries or descriptions of data for the Substance that would support your assumption that both the Substance and the source substances cause the same type of effects.
- 24 With respect to the Genetic toxicity:
- 25 For the source substances you provide the studies used in the prediction for the relevant information requirements, i.e. bacterial a reverse mutation test (OECD TG 471) with lanolin alcohols; an *in vitro* mammalian cell chromosome aberration test (OECD TG 473) with lanolin alcohols; an *in vitro* mammalian cell genemutation test (OECD TG 476) with lanolin fatty acids.
- 26 In addition, to support your claim of absence of mutagenicity for the Substance you refer to two carcinogenicity studies with Lanolin and Dioctyl sodium sulfosuccinate.
- 27 With regard to the carcinogenicity studies on Dioctyl sodium sulfosuccinate:
- i. The first study attempted to demonstrate an anti-carcinogenic effect of lanolin. All animals where exposed to known carcinogens methylcholantracene or 9,10-dimethyl-1,2- benzantracene in dissolved different solvents (including lanolin). All dose groups developed tumors irrespective of solvent. Consequently, the study does not support a claim of non-carcinogenicity.
 - ii. The second study exposed rats to Dioctyl sodium sulfosuccinate for two years. The study was conducted with 12 males per dose group. A carcinogenicity study according to the OECD TG 451 requires 50 animals per dose group and both sexes. The fact that only one sex was investigated using a small number of affects the relevance and reliability of the study for carcinogenicity. ECHA considers that this study is a chronic toxicity in males which does not allow conclusions with regard to carcinogenicity.
- 28 Based on the above, ECHA concludes that none of the studies support your claim of absence of mutagenicity by demonstrating absence of carcinogenicity.
- 29 Apart from these source studies, your read-across justification or the registration dossier does not include any robust study summaries or descriptions of data for the Substance that would support your assumption that both the Substance and the source substances cause the same type of effects.
- 30 You have not established that these source substances have similar properties as the Substance. There are no studies of comparable design and duration which would allow a side-by-side comparison of the properties of the Substance with those of the source substances.
- 31 In the absence of such information, you have not established that the Substance and the source substance(s) are likely to have similar properties.
- 32 Therefore you have not provided sufficient supporting information to scientifically justify the read-across adaptations.

0.1.1.2. *Incomplete information on the identity of the test material used in the source studies*

- 33 Under Annex XI, Section 1.5., if the grouping concept is applied then in all cases the results to be read across must be adequate for the purpose of classification and labelling and/or risk assessment.
- 34 In order to predict the properties of the Substance, the test material used in the study on the source substance must be representative for the source substance (Article 10 and Recital 19 of REACH; Guidance on IRs and CSA, Section R.4.1.). Therefore, the unambiguous characterisation of the composition of the test material used to generate the source data is required to assess whether the test material is representative for the source substance.
- 35 For *in vitro* mutagenicity, you have identified the test material as Lanolin alcohols, without further information, including composition of the test material.
- 36 For toxicity to reproduction, you have identified the test material as Dioctyl sodium sulfosuccinate, without further information on the identity of the test material.
- 37 In the absence of the information on the identity, including composition of the test material, you have not demonstrated that the test material is representative for the source substance.
- 38 Therefore, the studies, as currently reported in your dossier, are not adequate for the purpose of classification and labelling and/or risk assessment.

0.1.2. Conclusion on the read-across approach

- 39 For the reasons above, you have not established that relevant properties of the Substance can be predicted from data on the source substance(s). Your read-across approaches under Annex XI, Section 1.5. are rejected.

Reasons related to the information under Annex VII of REACH**1. Water solubility (Annex VII, Section 7.7.)**

40 Water solubility is an information requirement under Annex VII, Section 7.7.

1.1. Information provided

41 You have provided a key study using a test method MT 157 "Water solubility" of CIPAC (Collaborative International Pesticide Analytical Council) (2012).

1.2. Assessment of the information provided

42 We have assessed this information and identified the following issue(s):

43 To fulfil the information requirement for the Substance, a study must comply with the OECD TG 105 or the EU Method A.6 (Article 13(3) of REACH). Furthermore, to fulfil the water solubility information requirement for the UVCB substance, a range of water solubility values covering the constituents of the UVCB substance must be provided.

44 Your registration dossier provides information showing the following:

- A key study using a test method in accordance to the guideline MT 157 "Water solubility" of CIPAC (Collaborative International Pesticide Analytical Council) (2012) resulting a water solubility of ca. 6.6 g/L at 22 C , pH not specified;
- The substance composition information showing that the Substance is an UVCB which contains a highly complex mixture of twenty constituents.

45 A key study reported in your dossier has not been conducted in accordance with the OECD TG 105 or the EU Method A.6.

46 ECHA notes that you have provided a single value to represent the registered UVCB substance. However, water solubility values for the individual constituents should be provided for an UVCB substance as it may have constituents with different water solubilities that may not be accurately represented by a single water solubility value. The accurate information is needed for the design of for example aquatic toxicity testing (ECHA Guidance on information requirements and chemical safety assessment (version 4.0, June 2017), Chapter R.7b, Appendix R.7.8-1 for Sections R.7.8.1. to R.7.8.6 and related Table R.7.8-3).

47 On the basis of the above, the information requirement is not fulfilled.

1.3. Specification of the study design

48 According to ECHA Guidance on information requirements and chemical safety assessment (version 6.0, July 2017), Chapter R.7a, Table R.7.1-5, an OECD TG 105, Flask method, is also applicable to complex substances. You must determine the individual solubility levels of the constituents of the Substance by using a specific analytical method wherever possible. Further information on testing the physicochemical properties of the UVCB substances is available in Section 7.9 of the OECD Guidance document on testing of difficult test chemicals (OECD 23, February 2019).

49 In the comments to the draft decision, you do not agree to perform the requested study. However, you provide additional information on the water solubilities of the constituents of

the Substance indicating that it contains constituents that are poorly water soluble (< 1 mg/L).

50 ECHA acknowledges that based on this additional information in your comments, the information requirement can be met. However, as the information is currently not available in your registration dossier, the data gap remains. You should therefore submit this information (together with all relevant documentation allowing to assess its reliability) in an updated registration dossier by the deadline set out in the decision.

2. In vitro gene mutation study in bacteria

51 An *in vitro* gene mutation study in bacteria is an information requirement under Annex VII, Section 8.4.1.

2.1. Information provided

52 You have adapted this information requirement by using Annex XI, Section 1.5. (Grouping of substances and read-across approach) based on the following experimental data:

- (i) Bacterial reverse mutation assay (2010) conducted with Lanolin alcohols (no identifier or composition provided).

2.2. Assessment of the information provided

53 We have assessed this information and as explained in Section 0.1., your adaptation based on grouping of substances and read-across approach under Annex XI, Section 1.5 is rejected and the information requirement is not fulfilled.

2.3. Specification of the study design

54 To fulfil the information requirement for the Substance, the *in vitro* gene mutation study in bacteria (OECD TG 471, 2020) is considered suitable.

55 In the comments to the draft decision you agree with the request.

3. Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1., Column 1) (if the results of request 1 showed a water solubility above 1 mg/L)

56 Short-term toxicity testing on aquatic invertebrates is an information requirement under Annex VII to REACH (Section 9.1.1.).

3.1. Information provided

57 You have provided a study on short-term toxicity to aquatic invertebrates (2012) with the Substance (study i).

3.2. Assessment of the information provided

58 We have assessed this information and identified the following issue(s):

59 To fulfil the information requirement, a study must comply with OECD TG 202 and the requirements of OECD GD 23 if the substance is difficult to test (Article 13(3) of REACH). Therefore, the following specifications must be met:

60 Characterisation of exposure

- a) analytical monitoring must be conducted. A reliable analytical method for the quantification of the test material in the test solutions with reported specificity, recovery efficiency, precision, limits of determination (i.e. detection and quantification) and working range must be available;

61 Reporting of the methodology and results

- b) surface-active test chemicals are tested at concentrations below their critical micelle concentration (CMC) in the test medium.

62 In study (i) described as short-term toxicity study on daphnids you have provided the following:

63 Characterisation of exposure

- a) no analytical monitoring of exposure was conducted.

64 Reporting of the methodology and results

- b) the Substance is surface active based on the value of 38.9 mN/m reported in your dossier and you have not demonstrated that the test concentrations are below the critical micelle concentrations (CMC) in the test medium.

65 Based on the above, the Substance is difficult to test due to surface activity (38.9 mN/m) and there are critical methodological deficiencies resulting in the rejection of the study results. More specifically, no analytical monitoring was conducted and therefore it was not demonstrated that the test concentrations were below the critical micelle concentrations.

66 Therefore, the requirements of OECD TG 202 are not met and the information requirement is not fulfilled.

3.3. Study design and test specifications

67 The Substance is difficult to test due to the high surface activity (38.9 mN/m). The OECD TG 202 specifies that, for difficult to test substances, you must consider the approach described in the OECD GD 23 or other approaches, if more appropriate for your substance. In all cases, the approach selected must be justified and documented. Due to the properties of Substance, it may be difficult to achieve and maintain the desired exposure concentrations.

68 Therefore, you must monitor the test concentration(s) of the Substance throughout the exposure duration and report the results. If it is not possible to demonstrate the stability of exposure concentrations (i.e. measured concentration(s) not within 80-120% of the nominal concentration(s)), you must express the effect concentration based on measured values as described in the OECD TG 202.

69 In case a dose-response relationship cannot be established (no observed effects), you must demonstrate that the approach used to prepare test solutions was adequate to maximise the concentration of the Substance in the test solution.

70 For multi-constituents/UVCBs, the analytical method must be adequate to monitor qualitative and quantitative changes in exposure to the dissolved fraction of the test material during the test (e.g. by comparing mass spectral full-scan GC or HPLC chromatogram peak areas or by using targeted measures of key constituents or groups of constituents).

- 71 If you decide to use the Water Accommodated Fraction (WAF) approach, in addition to the above, you must:
- use loading rates that are sufficiently low to be in the solubility range of most constituents (or that are consistent with the PEC value). This condition is mandatory to provide relevant information for the hazard and risk assessment (Guidance on IRs and CSA, Appendix R.7.8.1-1, Table R.7.8-3);
 - provide a full description of the method used to prepare the WAF (including, among others, loading rates, details on the mixing procedure, method to separate any remaining non-dissolved test material including a justification for the separation technique);
 - prepare WAFs separately for each dose level (i.e. loading rate) and in a consistent manner.
- 72 In the comments to the draft decision, you do not agree to perform the requested OECD TG 202 study. Instead of performing a new OECD TG 202 study as requested, you propose to perform the long-term toxicity to aquatic invertebrates study (OECD TG 211) requested in Section 4. REACH Annex VII section 9.1.1 column 2 specifies that the short-term toxicity study does not need to be conducted if a long-term aquatic toxicity study on invertebrates is available. At present no long-term toxicity study on aquatic invertebrates is provided in the IUCLID dossier, therefore no conclusion on the compliance can currently be made. You remain responsible for complying with this decision by the set deadline.
- 73 Furthermore, ECHA notes that based on the information provided in the comments on the draft decision concerning request 1) for information on water solubility (Annex VII, Section 7.7.) it appears that some constituents of the Substance are poorly water soluble (water solubility < 1 mg/L). Once the dossier has been updated with this information, you have to take it into account for the present request.

4. Long-term toxicity testing on aquatic invertebrates (triggered by Annex VII, Section 9.1.1., Column 2): (if the results of request 1 showed a water solubility below 1 mg/L)

- 74 Short-term toxicity testing on aquatic invertebrates is an information requirement under Annex VII, Column 1, Section 9.1.1.. However, long-term toxicity testing on aquatic invertebrates must be considered (Section 9.1.1., Column 2) if the substance is poorly water soluble.

4.1. Triggering of the information requirement

- 75 Poorly water soluble substances require longer time to reach steady-state conditions. As a result, the short-term tests do not give a true measure of toxicity for this type of substances and the long-term test is required. A substance is regarded as poorly water soluble if, for instance, it has a water solubility below 1 mg/L or below the detection limit of the analytical method of the test material (Guidance on IRs and CSA, Section R.7.8.5).
- 76 You have provided information which indicates that the saturation concentration of the Substance in water is 6.6 g/L. However, as mentioned under Section 1 of this Appendix, the Substance is a UVCB containing multiple constituents and the conclusion on the water solubility of the Substance must be based on the water solubilities of the constituents of the Substance.
- 77 Therefore, if the results of the water solubility study requested under Section 1 of this Appendix will show that the Substance contains constituents with water solubility below 1

mg/L, the Substance will be considered as poorly water soluble and information on long-term toxicity on aquatic invertebrates will need to be provided.

In this context, ECHA notes that based on the information provided in the comments on the draft decision concerning request 1) for information on water solubility (Annex VII, Section 7.7.) it appears that some constituents of the Substance are poorly water soluble (water solubility < 1 mg/L). Once the dossier has been updated with this information, you have to take it into account for the present request.

4.2. Information provided

78 You have provided no information on long-term toxicity on aquatic invertebrates for the Substance.

79 Therefore, the information requirement is not fulfilled.

4.3. Study design and test specifications

80 The OECD TG 211 specifies that, for difficult to test substances, the OECD GD 23 must be followed. As already explained above, the Substance is difficult to test. Therefore, you must fulfil the requirements described in 'Study design and test specifications' under Request 3 above.

81 For multi-constituents/UVCBs, the analytical method must be adequate to monitor qualitative and quantitative changes in exposure to the dissolved fraction of the test material during the test (e.g. by comparing mass spectral full-scan GC or HPLC chromatogram peak areas or by using targeted measures of key constituents or groups of constituents).

82 If you decide to use the Water Accommodated Fraction (WAF) approach, in addition to the above, you must:

- use loading rates that are sufficiently low to be in the solubility range of most constituents (or that are consistent with the PEC value). This condition is mandatory to provide relevant information for the hazard and risk assessment (Guidance on IRs and CSA, Appendix R.7.8.1-1, Table R.7.8-3);
- provide a full description of the method used to prepare the WAF (including, among others, loading rates, details on the mixing procedure, method to separate any remaining non-dissolved test material including a justification for the separation technique);
- prepare WAFs separately for each dose level (i.e. loading rate) and in a consistent manner.

83 In the comments to the draft decision you agree with the request.

5. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)

84 Growth inhibition study on aquatic plants is an information requirement under Annex VII to REACH (Section 9.1.2.).

5.1. Information provided

85 You have provided a growth inhibition study on algae (2012) with the Substance (study i).

5.2. Assessment of the information provided

- 86 We have assessed this information and identified the following issue(s):
- 87 To fulfil the information requirement, a study must comply with the OECD TG 201 and the requirements of the OECD GD 23 if the substance is difficult to test (Article 13(3) of REACH). Therefore, the following specifications must be met:
- 88 Characterisation of exposure
- a) analytical monitoring must be conducted. Alternatively, a justification why the analytical monitoring of exposure concentrations is not technically feasible must be provided;
- 89 Reporting of the methodology and results
- b) surface-active test chemicals are tested at concentrations below their critical micelle concentration (CMC) in the test medium.
- 90 In study (i) described as growth inhibition study on aquatic plants/algae following was provided:
- 91 Characterisation of exposure
- a) no analytical monitoring of exposure was conducted and no justification was provided why the analytical monitoring is not technically feasible;
- 92 Reporting of the methodology and results
- b) the Substance is surface active based on the value of 38.9 mN/m reported in your dossier and you have not demonstrated that the test concentrations are below the critical micelle concentrations (CMC) in the test medium.
- 93 Based on the above, the Substance is difficult to test due to surface activity (38.9 mN/m) and there are critical methodological deficiencies resulting in the rejection of the study results. More specifically, no analytical monitoring was conducted and therefore it was not demonstrated that the test concentrations were below the critical micelle concentrations.
- 94 Therefore, the requirements of the OECD TG 201 are not met and the information requirement is not fulfilled.

5.3. Study design and test specifications

- 95 The OECD TG 201 specifies that, for difficult to test substances, the OECD GD 23 must be followed. As already explained above, the Substance is difficult to test. Therefore, you must fulfil the requirements described in 'Study design and test specifications' under Request 3.
- 96 For multi-constituents/UVCBs, the analytical method must be adequate to monitor qualitative and quantitative changes in exposure to the dissolved fraction of the test material during the test (e.g. by comparing mass spectral full-scan GC or HPLC chromatogram peak areas or by using targeted measures of key constituents or groups of constituents).
- 97 If you decide to use the Water Accommodated Fraction (WAF) approach, in addition to the above, you must:
- use loading rates that are sufficiently low to be in the solubility range of most constituents (or that are consistent with the PEC value). This condition is mandatory to provide relevant information for the hazard and risk assessment (Guidance on IRs and CSA, Appendix R.7.8.1-1, Table R.7.8-3);
 - provide a full description of the method used to prepare the WAF (including, among others, loading rates, details on the mixing procedure, method to separate any remaining non-dissolved test material including a justification for the separation technique);

- prepare WAFs separately for each dose level (i.e. loading rate) and in a consistent manner.

98 In the comments to the draft decision you agree with the request.

Reasons related to the information under Annex VIII of REACH**6. In vitro cytogenicity study in mammalian cells or In vitro micronucleus study**

99 An *in vitro* cytogenicity study in mammalian cells or an *in vitro* micronucleus study is an information requirement under Annex VIII, Section 8.4.2..

6.1. Information provided

100 You have adapted this information requirement by using Annex XI, Section 1.5. (Grouping of substances and read-across approach) based on the following experimental data:

- (i) *In vitro* mammalian chromosome aberration test (2010) conducted with Lanolin alcohols (no identifier or composition provided).

6.2. Assessment of the information provided

101 We have assessed this information and as explained in Section 0.1., your adaptation based on grouping of substances and read-across approach under Annex XI, Section 1.5 is rejected.

102 On this basis, the information requirement is not fulfilled.

6.3. Specification of the study design

103 According to the Guidance on IR & CSA, Section R.7.7.6.3., either the *in vitro* mammalian chromosomal aberration ("CA") test (test method OECD TG 473) or the *in vitro* mammalian cell micronucleus ("MN") test (test method OECD TG 487) can be used to investigate chromosomal aberrations *in vitro*. However, while the MN test detects both structural chromosomal aberrations (clastogenicity) and numerical chromosomal aberrations (aneuploidy), the CA test detects only clastogenicity, as OECD TG 473 is not designed to measure aneuploidy (see OECD TG 473, paragraph 2). Therefore, you must perform the MN test (test method OECD TG 487), as it enables a more comprehensive investigation of the chromosome damaging potential *in vitro*. Moreover, in order to demonstrate the ability of the study to identify clastogens and aneugens, you must include two concurrent positive controls, one known clastogen and one known aneugen [1] (OECD TG 487, paragraphs 33 to 35).

6.3.1. Assessment of aneugenicity potential

104 If the result of the MN test is positive, i.e. your Substance induces an increase in the frequency of micronuclei, you must assess the aneugenic potential of the Substance.

105 In line with the OECD TG 487 (paragraph 4), you should use one of the centromere labelling or hybridisation procedures to determine whether the increase in the number of micronuclei is the result of clastogenic events (i.e. micronuclei contain chromosome fragment(s)) and/or aneugenic events (i.e. micronuclei contain whole chromosome(s)).

[1] According to the TG 487 (2016) 'At the present time, no aneugens are known that require metabolic activation for their genotoxic activity' (paragraph 34).

106 In the comments to the draft decision you agree with the request.

7. In vitro gene mutation study in mammalian cells

- 107 An *in vitro* gene mutation study in mammalian cells is an information requirement under Annex VIII, Section 8.4.3., in case of a negative result in the *in vitro* gene mutation test in bacteria and the *in vitro* cytogenicity test.
- 108 Your dossier contains an adaptation for an *in vitro* gene mutation study in bacteria, and an adaptation for an *in vitro* cytogenicity study in mammalian cells or *in vitro* micronucleus study.
- 109 The information for the *in vitro* gene mutation study in bacteria and for the *in vitro* cytogenicity study in mammalian cells or *in vitro* micronucleus study provided in the dossier are rejected for the reasons provided in requests 2 and 6.
- 110 The result of the requests for an *in vitro* gene mutation study in bacteria and for an *in vitro* cytogenicity study in mammalian cells will determine whether the present requirement for an *in vitro* mammalian cell gene mutation study in accordance with Annex VIII, Section 8.4.3 is triggered.
- ~~111~~ Consequently, you are required to provide information for this information requirement, if the *in vitro* gene mutation study in bacteria and the *in vitro* cytogenicity study in mammalian cells or an *in vitro* micronucleus study provide a negative result.

7.1. Information provided

- 112 You have adapted this information requirement by using Annex XI, Section 1.5. (Grouping of substances and read-across approach) based on experimental data from the following substances:
- (i) *In vitro* mammalian cell gene mutation test (2010) conducted with Lanolin alcohols (no identifier or composition provided)

7.2. Assessment of the information provided

7.2.1. Read-across adaptation rejected

- 113 We have assessed this information and as explained in Section 0.1., your adaptation based on grouping of substances and read-across approach under Annex XI, Section 1.5 is rejected.
- 114 On this basis, the information requirement is not fulfilled.

7.3. Specification of the study design

- 115 To fulfil the information requirement for the Substance, either the *in vitro* mammalian cell gene mutation tests using the hprt and xprt genes (OECD TG 476) or the thymidine kinase gene (OECD TG 490) are considered suitable.
- 116 In the comments to the draft decision you agree with the request.

8. Short-term repeated dose toxicity (28 days)

- 117 A short-term repeated dose toxicity study (28 days) is an information requirement under Annex VIII, Section 8.6.1.

8.1. Information provided

118 You have adapted this information requirement by applying weight of evidence (WoE) adaptation in accordance with Annex XI, section 1.2. and using the following data:

- (i) Data obtained from a publication on a chronic toxicity study (1977) in dogs with oral administration of Dioctyl sodium sulphosuccinate (no information on purity, identifiers or composition provided);
- (ii) Data obtained from a publication on a chronic toxicity study (1948) in rats with dietary (biscuits) administration of Dioctyl sodium sulphosuccinate (no information on purity, identifiers or composition provided);
- (iii) Data obtained from a publication on a sub-acute toxicity study (1980) in mice with dietary coadministration of Cholesterol (EC. No. 200-353-2) and choline.

119 You justify the adaptation as follows:

- Sulfosuccinate of Lanoline Alcohol is chemically a complex substance. Some studies on Sulfosuccinates are reported to indicate the tested toxicity for a portion of the molecule. Lanoline is the other portion of the molecule; the study related to this portion was assessed with an available test performed with Cholesterol;
- The repeated toxicity of Dioctyl sodium sulfosuccinate was tested orally on dog, for 1 year (chronic exposure). The NOAEL was defined $\Rightarrow$ 30 mg/Kg. There were no effects on body weight, gross and microscopic tissue observation, haematological, blood chemistry, or urinalysis parameters;
- Lanoline is the other portion of the molecule; the repeated toxicity of Lanoline portion was assessed with Cholesterol study, due to the sterol similarity. This latter didn't define specific toxicity for organs, especially for the liver.

120 Based on the presented sources of information and the justifications, you argue that the available data gives sufficient information to conclude on the short-term repeated dose toxicity (28-days) of the Substance.

8.2. Assessment of the information provided

121 Annex XI, Section 1.2 states that there may be sufficient weight of evidence from several independent sources of information enabling, through a reasoned justification, a conclusion on the information requirement, while the information from each single source alone is insufficient to fulfil the information requirement.

122 The justification must have regard to the information that would otherwise be obtained from the study that must normally be performed for this information requirement.

123 According to ECHA Guidance R.4, a weight of evidence adaptation involves an assessment of the relative values/weights of the different sources of information submitted. The weight given is based on the reliability of the data, consistency of results/data, nature and severity of effects, and relevance and coverage of the information for the given regulatory information requirement.

124 Subsequently, relevance, reliability, coverage, consistency and results of these sources of information must be balanced in order to decide whether they together provide sufficient weight to conclude on the corresponding information requirement.

125 Relevant information that can be used to support weight of evidence adaptation for the information requirement of Annex VIII, Section 8.6.1. includes similar information that is produced by the OECD TG 407 with a design as specified in this decision. The OECD TG 407 requires the study to investigate the following key elements:

- (i) in-life observations;
- (ii) blood chemistry; and
- (iii) organ and tissue toxicity.

126 We have assessed the individual sources of information with regard to reliability and relevance (coverage) and identified the following issue(s):

8.2.1. In-life observations

127 In-life observations (aspect 1) must include information on survival, body weight development, clinical signs, functional observations, food/water consumption and other potential aspects of in life observations on the relevant physiological systems (circulatory, digestive/excretory, integumentary, musculoskeletal, nervous, renal/urinary, and respiratory).

128 The sources of information (i), (ii) and (iii) provide relevant information on the above mentioned in life observations, with the exception of clinical signs and functional observations. In addition, study (iii) are missing bodyweights and food consumption.

129 All studies have the following deficiencies affecting the reliability of its contribution to the weight of evidence adaptation:

8.2.1.1. Read-across rejected

130 For the reasons explained in Section 0.1. your read-across approach is rejected. You have not demonstrated that the properties of the Substances can be reliably predicted from the source substances. This applies equally in the context of weight of evidence.

8.2.1.2. Methodological issues, when compared with the OECD TG 407

131 According to the OECD TG 407, the following specifications must be met:

- a) testing is performed with at least three dose levels (unless conducted at the limit dose) and with concurrent controls;
- b) the highest dose level should be chosen with the aim of inducing toxic effects but not death or severe suffering. Thereafter, a descending sequence of dose levels should be selected with a view to demonstrating any dosage related response and no-observed-adverse effects at the lowest dose level (NOAEL).
- c) at least 5 male and 5 female animals are used for each concentration and control group;
- d) animals are fed a conventional laboratory diet;

132 In study (i)

- a) only one dose level was described;
- b) The highest dose level tested was 30 mg/kg/day, even if corrected with assessment factors for duration and species, this dose is below the limit dose of OECD TG 407, and no adverse effects were observed;

133 In study (ii)

- b) There is no descending sequence of dose-levels which allow a NOAEL to be established. The lowest dose level tested was 2% in diet induced severe toxicity, body weight -44%, a lowest-observed-adverse effects (LOAEL) was established at

this dose.

- c) only males were included in each test and control group;
- d) The diet used in the study contain 1% cod liver oil. Cod liver oil is known to have effects by itself. The effect of cod liver oil may affect the toxicity response to the substance tested. You have not accounted for this interference in your weight of evidence.

134 study (iii)

- a) only one dose level were described;
- b) There is no descending sequence of dose-levels which allow a NOAEL to be established. The only dose level tested was 1% in diet induced severe toxicity to the liver, a LOAEL was established at this dose. The study fail to establish a NOAEL. Therefore, the study is not useful for risk assessment.
- c) only males were included in each test and control group;

135 Therefore, the reliability of the contribution of the results obtained from studies (i), (ii) and (iii) to the weight of evidence with regard to aspect 1 is limited.

8.2.2. Aspect 2) blood chemistry

136 Information on blood chemistry (aspect 2) must include haematological (full-scale) and clinical chemistry analysis (full-scale), and other potential aspects related to blood chemistry to address relevant physiological systems (circulatory digestive/excretory, endocrine, immune, musculoskeletal, and renal/urinary).

137 Sources of information (ii) and (iii) do not provide relevant information on aspect 2.

138 The source of information (i) provide relevant information on some elements of aspect 2).

139 However, clinical chemistry analysis (full-scale) is missing.

140 In addition, the methodological deficiencies and read-across issues identified for aspect 1) equally apply to this aspect.

141 Therefore, the reliability of the contribution of the results obtained from this study to the weight of evidence with regard to aspect 2 is limited.

8.2.3. Aspect 3) organ and tissue toxicity

142 Organ and tissue toxicity (aspect 3) must include information on terminal observations on organ weights, gross pathology and histopathology (full-scale) and other potential aspects related to organ and tissue toxicity to address relevant physiological systems (circulatory, digestive/excretory, endocrine, immune, integumentary, musculoskeletal, nervous, renal/urinary system, reproductive, and respiratory).

143 The sources of information (i), (ii) and (iii) provides relevant information on the above organ and tissue toxicity, with the exception of full-scale histopathology.

144 In addition, the methodological deficiencies and read-across issues identified for aspect 1) equally apply to this aspect.

145 Therefore, the reliability of the contribution of the results obtained from this study to the weight of evidence with regard to aspect 3 is limited.

8.2.4. Conclusion on the weight of evidence

146 Overall, the sources of information do not cover all elements of the aspect 1) (clinical signs and functional observations are missing), of the aspect 2) (clinical chemistry analysis, full-scale, is missing) and of the aspect 3) (full-scale histopathology). Even for the elements

that are covered, the reliability of the information is affected, by severe methodological deficiencies (dose-setting), and deficiencies related to the use of the analogue substances.

147 Due to the above, it is not possible to conclude, based on any source of information alone or together, whether your Substance has or has not the particular dangerous properties foreseen to be investigated in an OECD TG 407 study.

148 On this basis, your adaptation is rejected and the information requirement is not fulfilled.

8.3. Specification of the study design

149 When there is no information available neither for the 28-day repeated dose toxicity (EU B.7, OECD TG 407), nor for the screening study for reproductive/developmental toxicity (OECD TG 421 or TG 422), the conduct of a combined repeated dose toxicity study with the reproduction/developmental toxicity screening test (OECD TG 422) is preferred to ensure that unnecessary animal testing is avoided. Such an approach offers the possibility to avoid carrying out a 28-day study according to OECD TG 407, because the OECD TG 422 can at the same time fulfil the information requirement of REACH Annex VIII, Section 8.6.1 and that of REACH Annex VIII, Section 8.7.1. (Guidance on IRs and CSA, Section R.7.6.2.3.2.).

150 For information on the study design see request for OECD TG 422 below.

151 In the comments to the draft decision you agree with the request.

9. Screening for reproductive/developmental toxicity

152 A screening for reproductive/developmental toxicity study (OECD 421 or OECD 422) is an information requirement under Annex VIII, Section 8.7.1., if there is no evidence from analogue substances, QSAR or in vitro methods that the substance may be a developmental toxicant.

9.1. Information provided

153 You have adapted this information requirement by using Annex XI, Section 1.5. (Grouping of substances and read-across approach) based on the following experimental data:

- (i) Three-generation reproductive toxicity study (1986) conducted with Dioctyl sodium sulphosuccinate (purity 99,4%; no identifier or impurities provided).

9.2. Assessment of the information provided

154 We have assessed this information and identified the following issue(s):

9.2.1. Read-across adaptation rejected

155 As explained in Section 0.1., your adaptation based on grouping of substances and read-across approach under Annex XI, Section 1.5 is rejected.

156 On this basis, the information requirement is not fulfilled.

9.3. Specification of the study design

157 A study according to the test method EU B.64/OECD TG 422 must be performed in rats.

158 The study must be conducted with oral administration of the Substance (Guidance on IRs and CSA, Section R.7.6.2.3.2.).

159 Therefore, the study must be conducted in rats with oral administration of the Substance.
160 In the comments to the draft decision you agree with the request.

**10. Short-term toxicity testing on fish (Annex VIII, Section 9.1.3., Column 1)
(if the results of request 1 showed a water solubility above 1 mg/L)**

161 Short-term toxicity testing on fish is an information requirement under Annex VIII to REACH
(Section 9.1.3.).

10.1. Information provided

162 You have provided a study on short-term toxicity to fish (2012) with the Substance (study
i).

10.2. Assessment of the information provided

163 We have assessed this information and identified the following issue(s):

164 To fulfil the information requirement, a study must comply with the OECD TG 203 and the
requirements of the OECD GD 23 if the substance is difficult to test (Article 13(3) of REACH).

165 Therefore, the following specifications must be met:

166 Characterisation of exposure

- a) analytical monitoring must be conducted. A reliable analytical method for the quantification of the test material in the test solutions with reported specificity, recovery efficiency, precision, limits of determination (i.e. detection and quantification) and working range must be available.

167 Reporting of the methodology and results

- b) surface-active test chemicals are tested at concentrations below their critical micelle concentration (CMC) in the test medium.

168 In study (i) described as a short-term toxicity study on fish the following information was
provided:

169 Characterisation of exposure

- a) no analytical monitoring of exposure was conducted;

170 Reporting of the methodology and results

- b) the Substance is surface active based on the value of 38.9 mN/m reported in your dossier and you have not demonstrated that the test concentrations are below the critical micelle concentrations (CMC) in the test medium.

171 Based on the above, the Substance is difficult to test due to surface activity (38.9 mN/m) and there are critical methodological deficiencies resulting in the rejection of the study results. More specifically, no analytical monitoring was conducted and therefore it was not demonstrated that the test concentrations were below the critical micelle concentrations.

172 Therefore, the requirements of the OECD TG 203 are not met and the information requirement is not fulfilled.

10.3. Study design and test specifications

- 173 The OECD TG 203 specifies that, for difficult to test substances, the OECD GD 23 must be followed. As already explained above, the Substance is difficult to test. Therefore, you must fulfil the requirements described in 'Study design and test specifications' under Request 3.
- 174 For multi-constituents/UVCBs, the analytical method must be adequate to monitor qualitative and quantitative changes in exposure to the dissolved fraction of the test material during the test (e.g. by comparing mass spectral full-scan GC or HPLC chromatogram peak areas or by using targeted measures of key constituents or groups of constituents).
- 175 If you decide to use the Water Accommodated Fraction (WAF) approach, in addition to the above, you must:
- use loading rates that are sufficiently low to be in the solubility range of most constituents (or that are consistent with the PEC value). This condition is mandatory to provide relevant information for the hazard and risk assessment (Guidance on IRs and CSA, Appendix R.7.8.1-1, Table R.7.8-3);
 - provide a full description of the method used to prepare the WAF (including, among others, loading rates, details on the mixing procedure, method to separate any remaining non-dissolved test material including a justification for the separation technique);
 - prepare WAFs separately for each dose level (i.e. loading rate) and in a consistent manner.
- 176 In the comments to the draft decision, you do not agree to perform the requested OECD TG 203 study. Instead of performing a new OECD TG 203 study as requested, you propose to perform the long-term toxicity to fish study (OECD TG 210) requested in Section 11. REACH Annex VIII section 9.1.3 column 2 specifies that the short-term toxicity study does not need to be conducted if a long-term study on fish is available. At present no long-term toxicity study on fish is provided in the IUCLID dossier, therefore no conclusion on the compliance can currently be made. You remain responsible for complying with this decision by the set deadline.

Furthermore, ECHA notes that based on the information provided in the comments on the draft decision concerning request 1) for information on water solubility (Annex VII, Section 7.7.) it appears that some constituents of the Substance are poorly water soluble (water solubility < 1 mg/L). Once the dossier has been updated with this information, you have to take it into account for the present request.

11. Long-term toxicity testing on fish (triggered by Annex VIII, Section 9.1.3., Column 2): if the results of request 1 showed a water solubility below 1 mg/L)

- 177 Short-term toxicity testing on fish is an information requirement under Annex VIII, Column 1, Section 9.1.3. However, long-term toxicity testing on fish must be considered (Section 9.1.3., Column 2) if the substance is poorly water soluble.

11.1. Triggering of the information requirement

- 178 Poorly water soluble substances require longer time to reach steady-state conditions. As a result, the short-term tests do not give a true measure of toxicity for this type of substances and the long-term test is required. A substance is regarded as poorly water soluble if, for instance, it has a water solubility below 1 mg/L or below the detection limit of the analytical method of the test material (Guidance on IRs and CSA, Section R.7.8.5).

- 179 You have provided information which indicates that the saturation concentration of the Substance in water is 6.6 g/L. However, as mentioned under Section 1 of this Appendix, the Substance is an UVCB containing multiple constituents and the conclusion on the water solubility of the Substance must be based on the water solubilities of the constituents of the Substance.
- 180 Therefore, if the results of the water solubility study requested under Section 1 of this Appendix will show that the Substance contains constituents with water solubility below 1 mg/L, the Substance will be considered as poorly water soluble and information on long-term toxicity on fish will need to be provided.
- 181 In this context, ECHA notes that based on the information provided in the comments on the draft decision concerning request 1) for information on water solubility (Annex VII, Section 7.7.) it appears that some constituents of the Substance are poorly water soluble (water solubility < 1 mg/L). Once the dossier has been updated with this information, you have to take it into account for the present request.

11.2. Information provided

- 182 You have provided no information on long-term toxicity on fish for the Substance.
- 183 Therefore, the information requirement is not fulfilled.

11.3. Study design and test specifications

- 184 The OECD TG 210 specifies that, for difficult to test substances, the OECD GD 23 must be followed. As already explained above, the Substance is difficult to test. Therefore, you must fulfil the requirements described in 'Study design and test specifications' under Request 3.
- 185 For multi-constituents/UVCBs, the analytical method must be adequate to monitor qualitative and quantitative changes in exposure to the dissolved fraction of the test material during the test (e.g. by comparing mass spectral full-scan GC or HPLC chromatogram peak areas or by using targeted measures of key constituents or groups of constituents).
- 186 If you decide to use the Water Accommodated Fraction (WAF) approach, in addition to the above, you must:
- use loading rates that are sufficiently low to be in the solubility range of most constituents (or that are consistent with the PEC value). This condition is mandatory to provide relevant information for the hazard and risk assessment (Guidance on IRs and CSA, Appendix R.7.8.1-1, Table R.7.8-3);
 - provide a full description of the method used to prepare the WAF (including, among others, loading rates, details on the mixing procedure, method to separate any remaining non-dissolved test material including a justification for the separation technique);

prepare WAFs separately for each dose level (i.e. loading rate) and in a consistent manner.

- 187 In the comments to the draft decision you agree with the request.

References

The following documents may have been cited in the decision.

Guidance on information requirements and chemical safety assessment (Guidance on IRs & CSA)

- Chapter R.4 Evaluation of available information; ECHA (2011).
Chapter R.6 QSARs, read-across and grouping; ECHA (2008).
Appendix to Chapter R.6 for nanoforms; ECHA (2019).
Chapter R.7a Endpoint specific guidance, Sections R.7.1 – R.7.7; ECHA (2017).
Appendix to Chapter R.7a for nanomaterials; ECHA (2017).
Chapter R.7b Endpoint specific guidance, Sections R.7.8 – R.7.9; ECHA (2017).
Appendix to Chapter R.7b for nanomaterials; ECHA (2017).
Chapter R.7c Endpoint specific guidance, Sections R.7.10 – R.7.13; ECHA (2017).
Appendix to Chapter R.7a for nanomaterials; ECHA (2017).
Appendix R.7.13-2 Environmental risk assessment for metals and metal compounds; ECHA (2008).
Chapter R.11 PBT/vPvB assessment; ECHA (2017).
Chapter R.16 Environmental exposure assessment; ECHA (2016).

Guidance on data-sharing; ECHA (2017).

Guidance for monomers and polymers; ECHA (2012).

Guidance on intermediates; ECHA (2010).

All guidance documents are available online: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Read-across assessment framework (RAAF)

- RAAF, 2017 Read-across assessment framework (RAAF); ECHA (2017).
RAAF UVCB, 2017 Read-across assessment framework (RAAF) – considerations on multi- constituent substances and UVCBs; ECHA (2017).

The RAAF and related documents are available online:

<https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across>

OECD Guidance documents (OECD GDs)

- OECD GD 23 Guidance document on aquatic toxicity testing of difficult substances and mixtures; No. 23 in the OECD series on testing and assessment, OECD (2019).
OECD GD 29 Guidance document on transformation/dissolution of metals and metal compounds in aqueous media; No. 29 in the OECD series on testing and assessment, OECD (2002).
OECD GD 150 Revised guidance document 150 on standardised test guidelines for evaluating chemicals for endocrine disruption; No. 150 in the OECD series on testing and assessment, OECD (2018).
OECD GD 151 Guidance document supporting OECD test guideline 443 on the extended one-generation reproductive toxicity test; No. 151 in the OECD series on testing and assessment, OECD (2013).

Appendix 2: Procedure

This decision does not prevent ECHA from initiating further compliance checks at a later stage on the registrations present.

ECHA followed the procedure detailed in Articles 50 and 51 of REACH.

The compliance check was initiated on 01 February 2022.

The deadline of the decision is set based on standard practice for carrying out OECD TG tests. It has been exceptionally extended by 12 months from the standard deadline granted by ECHA to take into account currently longer lead times in contract research organisations.

ECHA notified you of the draft decision and invited you to provide comments.

ECHA took into account your comments and did not amend the request(s).

ECHA notified the draft decision to the competent authorities of the Member States for proposals for amendment.

As no amendments were proposed, ECHA adopted the decision under Article 51(3) of REACH.

Appendix 3: Addressee of this decision and their corresponding information requirements

In accordance with Articles 10(a) and 12(1) of REACH, the information requirements for individual registrations are defined as follows:

- the information specified in Annex VII to REACH, for registration at 1-10 tonnes per year (tpa), or as a transported isolated intermediate in quantity above 1000 tpa;
- the information specified in Annexes VII and VIII to REACH, for registration at 10-100 tpa;
- the information specified in Annexes VII, VIII and IX to REACH, for registration at 100-1000 tpa;
- the information specified in Annexes VII to X to REACH, for registration at more than 1000 tpa.

Registrant Name	Registration number	Highest REACH Annex applicable to you
██████████	██████████	██████████

Where applicable, the name of a third party representative (TPR) may be displayed in the list of recipients whereas ECHA will send the decision to the actual registrant.

Appendix 4: Conducting and reporting new tests for REACH purposes

1. Requirements when conducting and reporting new tests for REACH purposes

1.1. Test methods, GLP requirements and reporting

- (1) Under Article 13(3) of REACH, all new data generated as a result of this decision must be conducted according to the test methods laid down in a European Commission Regulation or to international test methods recognised by the Commission or ECHA as being appropriate.
- (2) Under Article 13(4) of REACH, ecotoxicological and toxicological tests and analyses must be carried out according to the GLP principles (Directive 2004/10/EC) or other international standards recognised by the Commission or ECHA.
- (3) Under Article 10(a)(vi) and (vii) of REACH, all new data generated as a result of this decision must be reported as study summaries, or as robust study summaries, if required under Annex I of REACH. See ECHA Practical Guide on How to report robust study summaries².
- (4) Under the introductory part of Annexes VII/VIII/IX/X to REACH, where a test method offers flexibility in the study design, for example in relation to the choice of dose levels or concentrations, the chosen study design must ensure that the data generated are adequate for hazard identification and risk assessment.

1.2. Test material

- (1) Selection of the Test material(s)
The Test Material used to generate the new data must be selected taking into account the following:
 - the boundary composition(s) of the Substance,
 - the impact of each constituent/ impurity on the test results for the endpoint to be assessed. For example, if a constituent/ impurity of the Substance is known to have an impact on (eco)toxicity, the selected Test Material must contain that constituent/ impurity.
- (2) Information on the Test Material needed in the updated dossier
 - You must report the composition of the Test Material selected for each study, under the "Test material information" section, for each respective endpoint study record in IUCLID.
 - The reported composition must include the careful identification and description of the characteristics of the Tests Materials in accordance with OECD GLP (ENV/MC/CHEM(98)16) and EU Test Methods Regulation (EU) 440/2008 (Note, Annex), namely all the constituents must be identified as far as possible as well as their concentration. Also any constituents that have harmonised classification and labelling according to the CLP Regulation must be identified and quantified using the appropriate analytical methods,

This information is needed to assess whether the Test Material is relevant for the Substance.

² <https://echa.europa.eu/practical-guides>

Technical instructions on how to report the above is available in the manual on How to prepare registration and PPORD dossiers³.

2. General recommendations for conducting and reporting new tests

2.1. Environmental testing for substances containing multiple constituents

Your Substance contains multiple constituents and, as indicated in Guidance on IRs & CSA, Section R.11.4.2.2, you are advised to consider the following approaches for persistency, bioaccumulation and aquatic toxicity testing:

- the "known constituents approach" (by assessing specific constituents), or
- the "fraction/block approach, (performed on the basis of fractions/blocks of constituents), or
- the "whole substance approach", or
- various combinations of the approaches described above

Selection of the appropriate approach must take into account the possibility to characterise the Substance (i.e. knowledge of its constituents and/or fractions and any differences in their properties) and the possibility to isolate or synthesize its relevant constituents and/or fractions.

References to Guidance on REACH and other supporting documents can be found in Appendix 1.

³ <https://echa.europa.eu/manuals>