EUROPEAN CHEMICALS AGENCY

~~Confidential~~

Helsinki, 1 June 2021

Addressees
Registrant(s) of JS_123-28-4 as listed in the last Appendix of this decision

Date of submission of the dossier subject to this decision
17/09/2012

Registered substance subject to this decision ("the Substance")
Substance name: Didodecyl 3,3'-thiodipropionate
EC number: 204-614-1
CAS number: 123-28-4

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 the deadline of ***6 September 2022*** for request A.1 and ***8 March 2023*** for the other requests.

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

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

1. Skin sensitisation (Annex VII, Section 8.3.; test method:

   i) *in vitro/in chemico* skin sensitisation information on molecular interactions with skin proteins (OECD TG 442C), inflammatory response in keratinocytes (OECD TG 442D) and activation of dendritic cells (OECD TG 442E) (Annex VII, Section 8.3.1.) with the Substance; and

   ii) *in vivo* skin sensitisation (Annex VII, Section 8.3.2.; test method: EU B.42./OECD TG 429) with the Substance, in case the *in vitro/in chemico* test methods specified under point i) are not applicable for the Substance or the results obtained are not adequate for classification and risk assessment

2. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.; test method: EU C.3./OECD TG 201)
3. Long-term toxicity testing on aquatic invertebrates also requested below (triggered by Annex VII, Section 9.1.1., column 2)

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

1. Long-term toxicity testing on fish also requested below (triggered by Annex VIII, Section 9.1.3., column 2)

C. Information required from all the Registrants subject to Annex IX of REACH

1. Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.; test method: EU C.20./OECD TG 211)
2. Long-term toxicity testing on fish (Annex IX, Section 9.1.6.; test method: OECD TG 210)

Reasons for the request(s) are explained in the following appendices:

- Appendices entitled "Reasons to request information required under Annexes VII to IX of REACH", respectively.

Information required depends on your tonnage band

You must provide the information listed above for all REACH Annexes applicable to you, and in accordance with Articles 10(a) and 12(1) of REACH:

- 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.

You are only required to share the costs of information that you must submit to fulfil your information requirements.

For certain endpoints, ECHA requests the same study from registrants at different tonnages. In such cases, only the reasoning why the information is required at lower tonnages is provided in the corresponding Appendices. For the tonnage where the study is a standard information requirement, the full reasoning for the request including study design is given. Only one study is to be conducted; the registrants concerned must make every effort to reach an agreement as to who is to carry out the study on behalf of the other registrants under Article 53 of REACH.

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 testing and reporting requirements provided under the Appendix entitled "Requirements to fulfil when conducting and reporting new tests for REACH purposes". In addition, you should follow the general recommendations provided under the Appendix entitled "General recommendations when conducting and reporting new tests for REACH purposes". For references used in this decision, please consult the Appendix entitled "List of references".

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.

Authorised[1] under the authority of Christel Schilliger-Musset, Director of Hazard Assessment

[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 A: Reasons to request information required under Annex VII of REACH

1. Skin sensitisation

Skin sensitisation is a standard information requirement in Annex VII, Section 8.3. to the REACH Regulation. Column 1 of Section 8.3. requires the registrants to submit information allowing a conclusion whether the substance is a skin sensitiser and whether it can be presumed to have the potential to produce significant sensitisation in humans (Cat. 1A), and risk assessment, where required.

You have provided the following information in the technical dossier, based on which you conclude that the Substance is not a skin sensitiser:

i. *in vivo* Guinea Pig Maurer optimisation test with the Substance (key study, according to the US FDA guideline for the "Appraisal of the Safety of Chemicals in Foods, Drugs and Cosmetics" (1959), non-GLP, 1976).
ii. *in vivo* Guinea Pig Maximisation test with the analogue substance dioctadecyl 3,3'-sulfanediyldipropanoate EC no. 211-750-5 (CAS no. 693-36-7), (supporting study, EU Method B.6/OECD TG 406, GLP, 1992).

Although you do not explicitly claim this adaptation, ECHA understands that you rely on Annex VII, section 8.3.2, column 2, third paragraph, regarding the use of *in vivo* skin sensitisation studies that were carried out or initiated before 10 May 2017.

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

Issue 1: The study provided is not in line with the requirements in OECD TG 406

According to Annex VII, section 8.3.2, column 2, third paragraph, *in vivo* skin sensitisation studies that were carried out or initiated before 10 May 2017 must be considered appropriate to address this standard information requirement provided that they were carried out according to GLP and the test methods referred to in Article 13(3), in this case OECD TG 406 study.

The conditions of OECD TG 406 include:
- Dose level selection rationale
- The induction concentration should be the highest causing mild-to moderate irritation to the skin and the challenge dose should be the highest non-irritation concentration.

In the provided study (i):
- No dose level selection rationale was provided
- No information was provided whether the concentration used for induction caused mild-to-moderate irritation and whether the challenge concentration was the highest non-irritating concentration.

Therefore, the above conditions of an OECD TG 406 are not met.

Issue 2: Grouping of substances and read-across approach

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 a

justification for the read-across including a hypothesis, explanation of the rationale for the prediction of properties and robust study summary(ies) of the source study(ies).[2]

You have provided an OECD TG 406 study (ii) conducted with another substance than your Substance in order to comply with the REACH information requirements. You have not provided documentation as to why this information is relevant for your Substance to predict its toxicological properties.

In the absence of such documentation, ECHA cannot verify that the properties of your Substance can be predicted from the data on the source substance.

Based on the above, your adaptation under Annex VII, section 8.3.2, column 2, third paragraph, is rejected and the information requirement is not fulfilled.

In his comments to the draft decision, the lead registrant indicates his intention to adapt the standard information requirement mentioned above according to Annex XI, Section 1.3 (Qualitative or Quantitative structure-activity relationship ((Q)SAR)) of REACH. He further provides negative skin sensitisation predictions from the QSAR Toolbox, TIMES and DEREK models.

ECHA acknowledges the QSAR data provided by the lead registrant and notes the following shortcoming: according to ECHA Guidance R.7a (sections 7.3.5.1 and R.7.3.7.2), model predictions require careful interpretation considering all other pieces of information, like data on analogues, especially when predicting an absence of effects. You provided the QSAR predictions in isolation and without consideration of information from analogue substances with your comments from the lead registrant. ECHA notes for example from another registrant's comments that there may be analogue substances potentially sensitising.

In his comments, another registrant stated that information on *substances containing only internal sulfur and not free SH-groups* is available and that he will provide this information in an update of the registration dossier. The information in his comments is not sufficient for ECHA to make an assessment. In particular, the submitted information does not allow to differentiate the reliability of predictions for skin sensitising analogue substances and non-sensitising analogue substances, since it is not clear whether the predictions take into account all relevant parameters such as metabolism. Please note that this decision does not take into account updates of the registration dossiers after the date on which you were notified of the draft decision according to Article 50(1) of REACH (see section 5.4. of ECHA's Practical Guide "How to act in Dossier Evaluation).

Therefore, the information requirement is not fulfilled.

To fulfil the information requirement for the Substance for skin sensitisation, *in vitro/in chemico* studies (OECD TG 442C, 442D and 442E) are considered suitable. In case *in vitro/in chemico* methods are not suitable for the Substance or the results cannot be used for classification and risk assessment an *in vivo* skin sensitisation study must be performed and the murine local lymph node assay (LLNA) (OEDC TG 429) is considered as the appropriate study.

2. Growth inhibition study aquatic plants

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

[2] Guidance on information requirements and chemical safety assessment Chapter R.6: QSARs and grouping of Chemicals, Section R.6.2.6.1

You have provided the following information:

i. A key study performed with the Substance and according to the test guideline listed in Annex V to Directive 67/548/EEC (as amended by Directive 87/302/EEC),

ii. a supporting study performed with analogue substance dioctadecyl 3,3'-sulfanediyldipropanoate (EC: 211-750-5) and according to the test guideline listed in Annex V to Directive 67/548/EEC (as amended by Directive 87/302/EEC).

Both studies were performed in 1992 by the same testing facility [redacted] They were not conducted in accordance with the principles of good laboratory practice (GLP).

Although you do not explicitly claim an adaptation, ECHA understands that the information provided was submitted in order to meet the required information by way of adaptation under Annex XI, Sections 1.1.2 and 1.5.

We have assessed this information and identified the following issue:

Section 1.1.2 of Annex XI enables registrants to claim that the data from experiments not carried out according to GLP or the test methods referred to in Article 13(3) can be considered equivalent to data generated by those test methods where a number of cumulative conditions are met. This implies in particular an adequate and reliable coverage of the key parameters foreseen to be investigated in the corresponding test methods referred to in Article 13(3).

OECD TG 201 is the preferred test method to fulfil the information requirement of Section 9.1.2 of Annex VII to REACH. The study must also comply with the requirements of OECD GD 23 (ENV/JM/MONO(2000)6/REV1) if the substance is difficult to test. In particular, the following requirements must be met:

- 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. Alternatively, a justification why the analytical monitoring of exposure concentrations is not technically feasible must be provided;
- the test media prepared specifically for analysis of exposure concentrations during the test is treated identically to those used for testing (*i.e.* inoculated with algae and incubated under identical conditions);
- the concentrations of the test material are measured at least at the beginning and end of the test:
  1) at the highest, and
  2) at the lowest test concentration, and
  3) at a concentration around the expected EC_{50}.

  For volatile, unstable or strongly adsorbing test substances, additional samplings for analysis at 24 hour intervals is required.
- the results can be based on nominal or measured initial concentrations only if the concentrations of the test material has been maintained within 20 % of the nominal or measured initial concentrations throughout the test.

No analytical monitoring of exposure concentrations was conducted in study under (i).

On this basis, your adaptation under Annex XI, section 1.1.2, is rejected.

Section 1.5 of Annex XI enables registrants to use a read-across approach. Annex XI, Section 1.5 requires that whenever read-across is used, the results should have adequate and reliable coverage of the key parameters addressed in the corresponding test method referred to in Article 13(3). You have provided a supporting study performed with analogue substance

dioctadecyl 3,3'-sulfanediyldipropanoate (EC: 211-750-5). No analytical monitoring of exposure concentrations was conducted in this study. Therefore, as explained above, the study does not cover the key parameters addressed in the corresponding test method referred to in Article 13(3).

On this basis, your adaptation under Annex XI, section 1.5, is rejected.

In his comments to the draft decision, the lead registrant agrees to perform a growth inhibition study on aquatic plants.

Another registrant acknowledges the data gap for this information requirement. He explains his intention to develop a category approach for the Substance and other related substances. The information in the comments is not sufficient for ECHA to make an assessment under Section 1.5 of Annex XI of REACH, because he has not provided specific details on the definition of that category (no inclusion/exclusion criteria; no composition information), no read-across hypothesis, no supporting information, his planned testing strategy and in particular whether he intends to perform the test with the Substance. He indicates that his work on that approach is ongoing. Please note that this decision does not take into account updates of the registration dossiers after the date on which you were notified of the draft decision according to Article 50(1) of REACH (see section 5.4. of ECHA's Practical Guide "How to act in Dossier Evaluation").

Based on the above, the information requirement is not fulfilled.

Study design

The Substance is difficult to test due to the low water solubility (< 1 mg/L at 20°C) and potential adsorptive properties (log Kow predicted to be >11). OECD TG 201 specifies that, for difficult to test substances, you must consider the approach described in 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. 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 OECD TG 201. 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.

3. Long-term toxicity testing on aquatic invertebrates also requested below (triggered by Annex VII, Section 9.1.1., column 2)

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

You have provided the following information:

i. A key study performed with the Substance and according to OECD TG 202 (version 1984),
ii. a supporting study performed with analogue substance dioctadecyl 3,3'-sulfanediyldipropanoate (EC: 211-750-5) and according to OECD TG 202 (version 1984).

Both studies were performed in 1988 by the same testing facility [redacted] They were not conducted in accordance with the principles of good laboratory practice (GLP).

You have not provided long-term aquatic toxicity studies.

We have assessed this information and identified the following issue:

Poorly water soluble substances require longer time to reach steady-state conditions. As a result, 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 (ECHA Guidance R.7b, Section 7.8.5).

You have provided information which indicate that the Substance includes constituents that are poorly water soluble (< 1 mg/L at 20°C).

Therefore, the Substance is poorly water soluble and information on long-term toxicity on aquatic invertebrates must be provided.

The examination of the information provided, as well as the selection of the requested test and the test design are addressed under section C.1.

Appendix B: Reasons to request information required under Annex VIII of REACH

1. Long-term toxicity testing on fish also requested below (triggered by Annex VIII, Section 9.1.3., column 2)

Short-term toxicity testing on fish is a standard information requirement in Annex VIII to REACH (Annex VIII, Section 9.1.3). Long-term toxicity testing on fish must be considered (Section 9.1.3., Column 2) if the substance is poorly water soluble.

You have provided the following information:

i. A key study performed with the Substance and according to OECD TG 203 (version 1984),
ii. a supporting study performed with analogue substance dioctadecyl 3,3'-sulfanediyldipropanoate (EC: 211-750-5) and according to OECD TG 203 (version 1984).

Both studies were performed in 1988 by the same testing facility [redacted] They were not conducted in accordance with the principles of good laboratory practice (GLP).

You have not provided long-term aquatic toxicity studies.

We have assessed this information and identified the following issue:

Poorly water soluble substances require longer time to reach steady-state conditions. As a result, 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 (ECHA Guidance R.7b, Section 7.8.5).

You have provided information which indicate that the Substance includes constituents that are poorly water soluble (< 1 mg/L at 20°C).

As already explained under Section A.3, the Substance is poorly water soluble and information on long-term toxicity on fish must be provided.

The examination of the information provided, as well as the selection of the requested test and the test design are addressed under section C.2.

Appendix C: Reasons to request information required under Annex IX of REACH

1. Long-term toxicity testing on aquatic invertebrates

Long-term toxicity testing on aquatic invertebrates is an information requirement under Annex IX to REACH (Section 9.1.5.).

You have provided an adaptation under Annex IX, Section 9.1., Column 2 with the following justification:
"*In Annex IX of Regulation (EC) No 1907/2006, it is laid down that long term toxicity test on aquatic invertebrates shall be proposed by the registrant if the chemical safety assessment indicates the need to investigate further the effects on aquatic invertebrates. According to Annex I of this regulation, the chemical safety assessment triggers further action when the substance or the preparation meets the criteria for classification as dangerous according to Directive 67/548/EEC or Directive 1999/45/EC or is assessed to be a PBT or vPvB. The hazard assessment of the test substance reveals neither a need to classify the substance as dangerous to the environment, nor is it a PBT or vPvB substance, nor are there any further indications that the substance may be hazardous to the environment. Therefore, a long term toxicity test on aquatic invertebrates is not provided*".

We have assessed this information and identified the following issue:

Under Section 9.1., Column 2, Annex IX to REACH, the study may be omitted if the Chemical Safety Assessment demonstrates that risks towards the aquatic compartment arising from the manufacture and use of the substance are controlled (Annex I, Section 0.1). The justification for this adaptation must be documented in the Chemical Safety Report (CSR) and include all the following elements:

- the predicted no effect concentrations (PNEC) for the aquatic compartment which must be based on:
  - reliable information on the aquatic toxicity of the Substance for at least three trophic levels,
  - an appropriate assessment factor (AF) (ECHA Guidance R.10, Section R.10.3),
- a quantitative exposure assessment which leads to derivation of predicted environmental concentrations (PECs),
- the outcome of the risk characterisation ratio (RCR) which demonstrates that the risks are adequately controlled (*i.e.* PEC < PNEC).

For the reasons explained under request A.3, your dossier does not contain reliable hazard information for aquatic invertebrates. Therefore, reliable information on the aquatic toxicity of the Substance is not available for at least three trophic levels.

Therefore, a reliable PNEC cannot be derived and your adaptation is rejected.

In his comments to the draft decision, the lead registrant agrees to perform a long-term toxicity testing on aquatic invertebrates.

Another registrant acknowledges the data gap for this information requirement. He explains his intention to develop a category approach for the Substance and other related substances. The information in the comments is not sufficient for ECHA to make an assessment under Section 1.5 of Annex XI of REACH, because he has not provided specific details on the definition of that category (no inclusion/exclusion criteria; no composition information), no read-across hypothesis, no supporting information, his planned testing strategy and in particular whether he intends to perform the test with the Substance. He indicates that his work on that approach is ongoing. Please note that this decision does not take into account

updates of the registration dossiers after the date on which you were notified of the draft decision according to Article 50(1) of REACH (see section 5.4. of ECHA's Practical Guide "How to act in Dossier Evaluation").

On this basis, the information requirement is not fulfilled.

Study design

The Substance is difficult to test due to the low water solubility (< 1 mg/L at 20°C) and potential adsorptive properties (log Kow predicted to be >11). OECD TG 211 specifies that, for difficult to test substances, you must consider the approach described in 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. 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 OECD TG 211. 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.

2. Long-term toxicity testing on fish

Long-term toxicity testing on fish is an information requirement under Annex IX to REACH (Section 9.1.6.).

You have provided an adaptation under Annex IX, Section 9.1., Column 2 with the following justification:
"*In Annex IX of Regulation (EC) No 1907/2006, it is laid down that long term toxicity test on fish shall be proposed by the registrant if the chemical safety assessment indicates the need to investigate further the effects on fish. According to Annex I of this regulation, the chemical safety assessment triggers further action when the substance or the preparation meets the criteria for classification as dangerous according to Directive 67/548/EEC or Directive 1999/45/EC or is assessed to be a PBT or vPvB. The hazard assessment of the test substance reveals neither a need to classify the substance as dangerous to the environment, nor is it a PBT or vPvB substance, nor are there any further indications that the substance may be hazardous to the environment. Therefore, and for reasons of animal welfare, a long term toxicity test on fish is not provided*".

We have assessed this information and identified the following issue:

Under Section 9.1., Column 2, Annex IX to REACH, the study may be omitted if the Chemical Safety Assessment demonstrates that risks towards the aquatic compartment arising from the manufacture and use of the substance are controlled (Annex I, Section 0.1). The justification for this adaptation must be documented in the Chemical Safety Report (CSR) and include all the following elements:

- the predicted no effect concentrations (PNEC) for the aquatic compartment which must be based on:
    - reliable information on the aquatic toxicity of the Substance for at least three trophic levels,
    - an appropriate assessment factor (AF) (ECHA Guidance R.10, Section R.10.3),
- a quantitative exposure assessment which leads to derivation of predicted environmental concentrations (PECs),

- the outcome of the risk characterisation ratio (RCR) which demonstrates that the risks are adequately controlled (*i.e.* PEC < PNEC).

For the reasons explained under request B.1, your dossier does not contain reliable hazard information for fish. Therefore, reliable information on the aquatic toxicity of the Substance is not available for at least three trophic levels.

Therefore, a reliable PNEC cannot be derived and your adaptation is rejected.

In his comments to the draft decision, the lead registrant presents different elements in his comments:

1) He invokes animal welfare as a principle to avoid testing on vertebrate animals.

2) He proposes a tiered testing strategy. He agrees to perform the requested growth inhibition study with aquatic plants (request A.2) and the long-term toxicity testing on aquatic invertebrates (request A.3/C.1). He will revise the aquatic hazard assessment after the results of those two studies are available.

3) He mentions structural similarities between the Substance (Didodecyl 3,3'-thiodipropionate, CAS: 123-28-4) and Dioctadecyl 3,3'-thiodipropanoate (CAS: 693-36-7). He indicates that no long-term aquatic toxicity was observed up to the solubility limit for Dioctadecyl 3,3'-thiodipropanoate (CAS: 693-36-7).

4) Based on toxicological data with rats, he claims that the Substance will hydrolyse in vivo in fish as well. Based on public results for dodecanol, one of the alleged hydrolysis products, he claims that aquatic invertebrates are more sensitive in chronic aquatic tests than fish.

However, ECHA disagrees with the general approach proposed by the lead registrant:

1) Animal welfare does not constitute as such a valid justification to omit the standard information requirements of Annexes VII – X or a valid adaptation to these information requirements.

2) No legal basis for this argument was provided.

   Annex IX, Section 9.1., Column 2 does not allow omitting the need to submit information on long-term toxicity to fish under Column 1. It must be understood as a trigger for providing further information on long-term toxicity to fish if the chemical safety assessment according to Annex I indicates the need (Decision of the Board of Appeal in case A-011-2018).

   In any case, for the derivation of $PNEC_{aquatic}$, data on at least three trophic levels (fish, aquatic invertebrates, and aquatic plants) are required. As the Substance is poorly soluble, short-term data are not reliable for the derivation of the PNEC. Therefore, long-term or chronic data for at least three trophic levels are needed for deriving $PNEC_{aquatic}$.

3) A read-across between the Substance (Didodecyl 3,3'-thiodipropionate, CAS: 123-28-4) and Dioctadecyl 3,3'-thiodipropanoate (CAS: 693-36-7) would not be valid.

   According to Annex XI, Section 1.5., two conditions shall be necessarily fulfilled to apply grouping and read-across. 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. 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 (read-across approach).

A read-across hypothesis needs to be provided, establishing why a prediction for a toxicological or ecotoxicological property is reliable. This hypothesis should be based on recognition of the structural similarities and differences between the substances[3]. It should explain why the differences in the chemical structures should not influence the toxicological/ ecotoxicological properties or should do so in a regular pattern.

There are substantial difference of chain lengths between the source and the target substances which you have not assessed although the two substances could be expected to exhibit different physico-chemical properties and possibly different bioavailability and toxicity properties on that basis. In particular, Dioctadecyl 3,3'-thiodipropanoate (CAS: 693-36-7) could be expected to have a much lower water solubility than the Substance.

4) No legal basis for this argument was provided.

In any case, the lead registrant's claim that the Substance will hydrolyse in vivo in fish to dodecanol is not substantiated by any experimental observation in fish. He has not provided evidence that the Substance will hydrolyse to dodecanol in aquatic invertebrates either. Furthermore, even if in vivo hydrolysis were established for both fish and aquatic invertebrates, he would have to consider the other hydrolysis products as well (not only dodecanol), and to justify that the effects are driven by the hydrolysis products instead of by the Substance itself. Therefore, he cannot use the results observed for dodecanol to extrapolate the relative sensitivity of fish and aquatic invertebrates.

Another registrant acknowledges the data gap for this information requirement. He explains his intention to develop a category approach for the Substance and other related substances. However, he has not provided specific details on the definition of that category, his planned testing strategy and in particular whether he intends to perform the test with the Substance. He indicates that his work on that approach is ongoing. Therefore, it cannot be assessed.

On this basis, the information requirement is not fulfilled.

Study design

To fulfil the information requirement for the Substance, the Fish, Early-life Stage Toxicity Test (test method OECD TG 210) is the most appropriate (ECHA Guidance R.7.8.2.).

The Substance is difficult to test due to the low water solubility (< 1 mg/L at 20°C) and potential adsorptive properties (log Kow predicted to be >11). OECD TG 210 specifies that, for difficult to test substances, you must consider the approach described in 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. Therefore, you must monitor the test concentration(s) of the Substance throughout the exposure duration and report the

[3] *Guidance on information requirements and chemical safety assessment*, Chapter R.6: QSARs and grouping of chemicals.

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 OECD TG 210. 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.

Appendix D: Requirements to fulfil when conducting and reporting new tests for REACH purposes

A. 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 summaries[4].

B. Test material

Before generating new data, you must agree within the joint submission on the chemical composition of the material to be tested (Test Material) which must be relevant for all the registrants of the Substance.

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 variation in compositions reported by all members of the joint submission,
   - 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 all constituents of each Test Material and their concentration values and other parameters relevant for the property to be tested.

This information is needed to assess whether the Test Material is relevant for the Substance and whether it is suitable for use by all members of the joint submission.

Technical instructions on how to report the above is available in the manual on How to prepare registration and PPORD dossiers[5].

[4] https://echa.europa.eu/practical-guides
[5] https://echa.europa.eu/manuals

Appendix E: 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 11 December 2019.

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

ECHA took into account your comments and did not amend the requests but extended the deadline for some of them as follows:

> The timeline indicated in the draft decision to provide the information requested is 12 months from the date of the decision.
>
> Regarding request A.1, a member registrant requested an unspecified extension of the timeline for providing a read-across adaptation, stating the following: "*Our intention is to constantly improve and optimize our strategy in the next years. We would like to further develop a strategy for a Category Approach: Mercaptocarboxylic acids, their esters and related compounds. This is a long and tedious process and we are glad to have the support from our former consultants working with us during the last registration periods. However, we see a risk not to comply with the timelines set in the draft decisions.*". He also mentions difficulties for small size companies compared to bigger companies or large consortia considering their respective resources available.
>
> Regarding requests A.2, A.3, B.1, C.1, C.2, the lead registrant requested an extension to 18 months to provide the information, indicating that "*The substance is difficult to test in aquatic test systems. It is poorly soluble, adsorptive and readily biodegradable.*", with a need for an additional 12 months for a tiered approach.
>
> However, the member registrant did not provide any documentation to support his request and did not specify the extra time needed. Furthermore, ECHA observes that the studies the lead registrant proposed to perform on ready biodegradability in a tiered approach were not requested in the draft decision on the Substance. The present decision does not require you to perform such studies and thereby the imposed deadlines cannot be affected. However, ECHA agrees that the Substance is difficult to test in aquatic systems.
>
> On this basis, ECHA has not modified the deadline to provide the information for request A.1 but has partially granted the request from the lead registrant and extended the deadline to 18 months for requests A.2, A.3, B.1, C.1, C.2.

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 F: List of references - ECHA Guidance[6] and other supporting documents

Evaluation of available information
Guidance on information requirements and chemical safety assessment, Chapter R.4 (version 1.1., December 2011), referred to as ECHA Guidance R.4 where relevant.

QSARs, read-across and grouping
Guidance on information requirements and chemical safety assessment, Chapter R.6 (version 1.0, May 2008), referred to as ECHA Guidance R.6 where relevant.

Read-across assessment framework (RAAF, March 2017)[7]

RAAF - considerations on multiconstituent substances and UVCBs (RAAF UVCB, March 2017)[7]

Physical-chemical properties
Guidance on information requirements and chemical safety assessment, Chapter R.7a (version 6.0, July 2017), referred to as ECHA Guidance R.7a in this decision.

Toxicology
Guidance on information requirements and chemical safety assessment, Chapter R.7a (version 6.0, July 2017), referred to as ECHA Guidance R.7a in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.7c (version 3.0, June 2017), referred to as ECHA Guidance R.7c in this decision.

Environmental toxicology and fate
Guidance on information requirements and chemical safety assessment, Chapter R.7a (version 6.0, July 2017), referred to as ECHA Guidance R.7a in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 4.0, June 2017), referred to as ECHA Guidance R.7b in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.7c (version 3.0, June 2017), referred to as ECHA Guidance R.7c in this decision.

PBT assessment
Guidance on information requirements and chemical safety assessment, Chapter R.11 (version 3.0, June 2017), referred to as ECHA Guidance R.11 in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.16 (version 3.0, February 2016), referred to as ECHA Guidance R.16 in this decision.

Data sharing
Guidance on data-sharing (version 3.1, January 2017), referred to as ECHA Guidance on data sharing in this decision.

OECD Guidance documents[8]

[6] https://echa.europa.eu/guidance-documents/guidance-on-information-requirements-and-chemical-safety-assessment
[7] https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across
[8] http://www.oecd.org/chemicalsafety/testing/series-testing-assessment-publications-number.htm

Guidance Document on aqueous-phase aquatic toxicity testing of difficult test chemicals – No 23, referred to as OECD GD 23.

Guidance document on transformation/dissolution of metals and metal compounds in aqueous media – No 29, referred to as OECD GD 29.

Guidance Document on Standardised Test Guidelines for Evaluating Chemicals for Endocrine Disruption – No 150, referred to as OECD GD 150.

Guidance Document supporting OECD test guideline 443 on the extended one-generation reproductive toxicity test – No 151, referred to as OECD GD 151.

Appendix G: Addressees of this decision and the corresponding information requirements applicable to them

You must provide the information requested in this decision for all REACH Annexes applicable to you.

Registrant Name	Registration number	Highest REACH Annex applicable to you
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

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.