

Helsinki, 25 February 2022

Addressees

Registrant(s) listed in the last Appendix of this decision

Date of submission of the dossier subject to this decision

14/08/2015

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

Substance name: Decene, hydroformylation products, high boiling

EC number: 935-454-7

CAS number: NS

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 in C.1 below by **01 September 2023** and all other information listed below by **02 September 2024**.

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.) with the Substance
 - i. *in vitro/in chemico* skin sensitisation information on inflammatory response in keratinocytes (OECD TG 442D) and activation of dendritic cells (EU B.71/OECD TG 442E) (Annex VII, Section 8.3.1.); and
 - ii. Only if 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, *in vivo* skin sensitisation (Annex VII, Section 8.3.2.; test method: EU B.42./OECD TG 429);
2. In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.; test method: EU B.13/14. / OECD TG 471)
3. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.; test method: EU C.3./OECD TG 201)

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

1. In vitro cytogenicity study in mammalian cells (Annex VIII, Section 8.4.2.; test method: OECD TG 473) or In vitro micronucleus study (Annex VIII, Section 8.4.2.; test method: OECD TG 487)
2. If negative results are obtained in tests performed for the information requirement 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)

3. Simulation testing on ultimate degradation in surface water also requested below (triggered by Annex VIII, Section 9.2.)
4. Soil simulation testing also requested below (triggered by Annex VIII, Section 9.2.)
5. Sediment simulation testing also requested below (triggered by Annex VIII, Section 9.2.)
6. Identification of degradation products also requested below (triggered by Annex VIII, Section 9.2.)

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

1. Sub-chronic toxicity study (90-day) (Annex IX, Section 8.6.2.; test method: OECD TG 408) by oral route, in rats
2. Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.; test method: OECD TG 414) by oral route, in one species (rat or rabbit)
3. Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.; test method: EU C.20./OECD TG 211)
4. Long-term toxicity testing on fish (Annex IX, Section 9.1.6.; test method: OECD TG 210)
5. Simulation testing on ultimate degradation in surface water (Annex IX, Section 9.2.1.2.; test method: EU C.25./OECD TG 309) at a temperature of 12°C. Non-extractable residues (NER) must be quantified and a scientific justification of the selected extraction procedures and solvents must be provided.
6. Soil simulation testing (Annex IX, Section 9.2.1.3.; test method: EU C.23./OECD TG 307) at a temperature of 12°C. Non-extractable residues (NER) must be quantified and a scientific justification of the selected extraction procedures and solvents must be provided.
7. Sediment simulation testing (Annex IX, Section 9.2.1.4.; test method: EU C.24./OECD TG 308) at a temperature of 12°C. Non-extractable residues (NER) must be quantified and a scientific justification of the selected extraction procedures and solvents must be provided.
8. Identification of degradation products (Annex IX, 9.2.3.; test method: using an appropriate test method)

D. Information required from all the Registrants subject to Annex X of REACH

1. Pre-natal developmental toxicity study (Annex X, Section 8.7.2.; test method: OECD TG 414) by oral route, in a second species (rat/rabbit)

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

- Appendix entitled "Reasons common to several requests";
- Appendices entitled "Reasons to request information required under Annexes VII to X 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 Annexes VII to X to REACH, for registration at more than 1000 tpa.

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".

The studies relating to biodegradation are necessary for the PBT assessment. However, to determine the testing needed to reach the conclusion on the persistency of the Substance you should consider the sequence in which these tests are performed, potential alternative testing strategies and other conditions described in Appendix entitled "Requirements to fulfil when conducting and reporting new tests for REACH purposes".

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

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 on Reasons common to several requests

1. Assessment of your read-across approach under Annex XI, Section 1.5.

You seek to adapt the following standard information requirements by applying (a) read-across approach(es) in accordance with Annex XI, Section 1.5:

- Skin sensitisation (Annex VII, Section 8.3)
- 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.)
- Sub-chronic toxicity study (90-day), (Annex IX, Section 8.6.2.)
- Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.)
- Pre-natal developmental toxicity study in a second species (Annex X, Section 8.7.2.)
- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)

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 appendices.

Grouping of substances and read-across approach

Annex XI, Section 1.5. specifies two conditions which must be fulfilled whenever a read-across approach is used. 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 (addressed under 'Assessment of prediction(s)').

Additional information on what is necessary when justifying a read-across approach can be found in the ECHA Guidance R.6. and related documents^{2,3}.

A. Prediction for (eco-)toxicological properties

You have provided a read-across justification document in IUCLID Section 13.

You read-across between the structurally similar substance,

1) *Alkenes, C11-12, hydroformylation products, distn. residues*, EC No. 292-427-6, also identified by you as Alchisor CAL 123, as source substance and the Substance as target substance, for all endpoints listed above. Additional source substances for the endpoint pre-natal developmental toxicity in a first species are:

- 2) *Docosan-1-ol*, EC 211-546-6
- 3) *mixture of C24-34 even chain alcohols* (no EC number)
- 4) *3-methylbutan-1-ol*, EC 204-633-5.

You have provided the following reasoning for the prediction of (eco-)toxicological properties: *"Available information supports the prediction that Alchisor CAL 111 and CAL 123 can be considered analogue substances, and that data from the LCA Category can be used as further*

² Read-Across Assessment Framework (RAAF). 2017 (March) ECHA, Helsinki. 60 pp. Available online: [Read-Across Assessment Framework \(https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across\)](https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across)

³ Read-across assessment framework (RAAF) - considerations on multi-constituent substances and UVCBs. 2017 (March) ECHA, Helsinki. 40 pp. Available online: <https://doi.org/10.2823/794394>

evidence for read-across within a category."

"It is therefore expected that Alchisor CAL 123 and Alchisor CAL 111 exhibit highly similar compositions, albeit that the constituents of Alchisor CAL 123 are likely to contain constituents with a slightly longer carbon chain length than Alchisor CAL 111. In conclusion, the manufacturing process of the two Alchisor CAL products is the same and the resulting structural composition is very similar with the same ratio of constituent chemicals, only differing in carbon chain length."

"the variability in composition will apply equally to Alchisor CAL 111 and Alchisor CAL 123."

"Alchisor CAL 123 and Alchisor CAL 111 represent substances with very similar constituents. A high degree of structural similarity is observed both in terms of the type of functional groups present and the relative contribution that each of these groups makes to both Alchisor CAL 123 and Alchisor CAL 111".

ECHA understands that you predict the properties of the Substance using a read-across hypothesis which assumes that different compounds have the same type of effects. The properties of your Substance are predicted to be quantitatively equal to those of the source substance.

ECHA notes the following shortcomings with regards to predictions of (eco-)toxicological properties.

1. Supporting information

Annex XI, Section 1.5 of the REACH Regulation states that "*physicochemical properties, human health effects and environmental effects or environmental fate may be predicted from data for reference substance(s)*". For this purpose "*it is important to provide supporting information to strengthen the rationale for the read-across*"⁴. The set of supporting information should allow to verify the crucial aspects of the read-across hypothesis and establish that the properties of the Substance can be predicted from the data on the source substance(s). Supporting information (1) must cover all constituents of a constituent-based read-across approach; (2) must confirm your claimed prediction; and (3) could be in the form of a bridging study with the Substance.

As indicated above, your read-across hypothesis is based on the assumption that the structurally similar substances cause the same type of effect(s). In this context, relevant, reliable and adequate information allowing to compare the properties of the Substance and of the source substance(s) is necessary to confirm that both substance 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).

You report the composition of the Substance with ranges of concentration (typical concentration) as

- I. 1-tridecanol-2-nonyl: [REDACTED]
- II. 2-(undecyloxy)-1-dodecanol: [REDACTED]
- III. Aldols, C33-C36: [REDACTED]
- IV. Acetals, C33-C36: [REDACTED]
- V. Alcohols 2-alkyl branched, C24-C26: [REDACTED]
- VI. Alcohols, 2-alkyl branched, C23: [REDACTED]
- VII. Ether-alcohols, C25-C26-C27: [REDACTED]

⁴ Guidance on information requirements and chemical safety assessment Chapter R.6: QSARs and grouping of Chemicals, Section R.6.2.2.1.f

- VIII. undecanol, branched and linear: [REDACTED]
- IX. Diols, C13-C14-C15: [REDACTED]
- X. Ether-alcohols, C24: [REDACTED]
- XI. ethers, C22-C26: [REDACTED]
- XII. Diols, C12: [REDACTED]
- XIII. Alcohols, C12-13-branched and linear: [REDACTED].

In your dossier, you have provided the studies listed in the appendices on *reasons for the requests A-D* with the source substance (1) Alchisor CAL 123 for all endpoints, and additionally the source substances (2) to (4) listed under **1.A.** above. You have not provided any bridging study with the Substance for any endpoint for which you attempt to read across.

Constituents III-VII and IX-XIII are not well-defined substances. Instead, these are UVCB substances with no discrete constituents to be compared with the test materials. The comparison of constituents demonstrates differences in the order of [REDACTED] in total. This lowers the confidence in the prediction. The data set reported in the technical dossier does not include relevant, reliable and adequate information for the Substance and of the source substances to support your read-across hypothesis.

In the comments to the initial draft decision you state your intentions to improve the (eco)toxicological profile of the Substance and your plans to refine your read-across approach, including an OECD TG 422 study in rats with the Substance as bridging study.

In the absence of information for all constituents and/or a bridging study with the Substance, you have not established that the source substance constitutes comparable type and strength of effects for the prediction of the property under consideration of the Substance. Therefore you have not provided sufficient supporting information to strengthen the rationale for the read-across.

As indicated in your comments, this strategy relies essentially on data which is yet to be generated, therefore no conclusion on the compliance can currently be made. The acceptability of the adaptation will be conditional to the acceptability of the predicted properties. Please note that this decision does not consider 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"). You remain responsible for complying with this decision by the set deadline.

Therefore, the information provided is not sufficient to cover all constituents of the Substance, and not sufficient to conclude that the properties of the source substance(s) and of the Substance are likely to be similar.

2. Characterisation of the test material

Annex XI, Section 1.5 of the REACH Regulation provides that "*substances whose physicochemical, toxicological and ecotoxicological properties are likely to be similar or follow a regular pattern as a result of structural similarity may be considered as group.*"

According to the ECHA Guidance, "*the purity and impurity profiles of the substance and the structural analogue need to be assessed*", and "*the extent to which differences in the purity and impurities are likely to influence the overall toxicity needs to be addressed, and where technically possible, excluded*". The purity profile and composition can influence the overall toxicity/properties of the Substance and of the source substance(s).⁵ Therefore, qualitative

⁵ Guidance on information requirements and chemical safety assessment Chapter R.6: QSARs and grouping of Chemicals, Section R.6.2.3.1

and quantitative information on the compositions of the Substance and of the source substance as well as on the test material in the studies should be provided to allow assessment whether the attempted predictions are compromised by the composition and/or impurities.

Furthermore, whenever the Substance and/or the source substance and/or the test material are UVCB (Unknown or Variable composition, Complex reaction products or of Biological materials) substances qualitative compositional information of the individual constituents of the substances needs to be provided; as well as quantitative characterisation in the form of information on the concentration of the individual constituents of these substances; to the extent that this is measurable.⁶

Your read-across justification document contains compositional information on the groups of constituents present in the composition of the source substance. In the registration dossier for the studies with the source substance you only report generic name of the substance tested. The Substance and the source substance (which is claimed to be the test material in the source studies) is a UVCB composed of various groups of constituents with different functional groups and/or carbon chain lengths.

However, there is no information on the identity and concentration of the individual constituents and not even on groups of constituents for the test material in any of the source studies provided in the registration dossier.

Without such information, no qualitative or quantitative comparative assessment of the compositions of the Substance and of the test material used in the source studies can be completed. Therefore, ECHA considers that it is not possible to assess whether the attempted predictions are compromised by the composition of UVCB test materials and their relation to the Substance.

3. Adequacy and reliability of studies

According to Annex XI, Section 1.5., if the grouping concept is applied then in all cases the results to be read across should:

- be adequate for the purpose of classification and labelling and/or risk assessment;
- have adequate and reliable coverage of the key parameters addressed in the corresponding test method referred to in Article 13(3).
- have adequate and reliable documentation of the applied method.

Studies must be conducted in accordance with the corresponding test methods referred to in Article 13(3) and according to the provisions of the REACH Annexes. Additional issues of adequacy and reliability of studies submitted are identified and addressed in the relevant endpoint-specific reasons in appendices A.3 and C.2.

Due to these shortcomings, ECHA concludes that the studies are unreliable. Therefore, they cannot be used to predict the properties of the Substance.

B. Conclusions on the read-across approach

As explained above, you have not established that relevant properties of the Substance can be predicted from data on the analogue substance. Therefore, your adaptation does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. and your grouping and read-across approach is rejected.

⁶ Guidance on information requirements and chemical safety assessment Chapter R.6: QSARs and grouping of Chemicals, Section R.6.2.5.5

2. Aquatic toxicity

You have provided the following similar information and same adaptations for long-term toxicity testing on aquatic invertebrates and on fish (Sections 9.1.5. and 9.1.6 of Annex IX to REACH respectively):

- i. a justification to omit the studies on long-term toxicity on aquatic invertebrates and on fish which you consider to be based on Annex IX, Section 9.1., Column 2. In support of your adaptation, you provided the following justification:
"In accordance with REACH Annex IX, the requirement for long-term toxicity to invertebrates and fish is waived on the basis that the substance or its analogue is readily biodegradable and has low toxicity to aquatic life. No reliable predicted or measured long-term toxicity to invertebrates and fish data are available for Alchisor CAL 111. [...] In accordance with Column 2 of REACH Annex IX, the long-term aquatic toxicity to invertebrates study (required in Section 9.1.6) and the long-term aquatic toxicity to fish study do not need to be conducted for Alchisor CAL 123 as the chemical safety assessment according to Annex I indicates that this is not necessary."
- ii. Short-term toxicity study on aquatic invertebrates.
- iii. Short-term toxicity study on fish .

We have assessed this information and identified the following issue:

Adaptation

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

Therefore, your adaptation is rejected.

Short-term studies

Poorly water soluble substances require longer time to reach steady-state conditions. As a result, the short-term tests does 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, or constituents have, a water solubility below 1 mg/l or below the detection limit of the analytical method of the test material (ECHA Guidance R.7.8.5).

You have provided information which indicates that the Substance includes constituents that are poorly water soluble. In the section 4.8 of the IUCLID dossier you conclude that the water solubility based on the measurements of total organic carbon of dissolved constituents of the Substance is 12 mg/l, i.e. implying that the individual water solubilities of some constituents of the Substance are below 1 mg/l.

Therefore, the short-term studies must be rejected and information on long-term toxicity on aquatic invertebrates and on fish must be provided.

In the comments to the initial draft decision, you agree to perform the requested studies.

3. Degradation testing on the initial draft decision

You have provided the following same adaptation for simulation testing on ultimate degradation in surface water, on soil and on sediment (Sections 9.2.1.2., 9.2.1.3. and 9.2.1.4. of Annex IX to REACH respectively):

- An adaptation under Annex IX, Section 9.2., Column 2 with the following justification: *"the study does not need to be conducted because the substance is readily biodegradable"*.

We have assessed this information and identified the following issue:

Under Sections 9.2.1.2., 9.2.1.3. and 9.2.1.4., Column 2 of Annex IX to REACH, the studies may be omitted if the substance is readily biodegradable.

You provided a key study according to OECD TG 301B conducted with the source substance Alchisor CAL 123 on the basis of which you conclude that the Substance is readily biodegradable.

As explained in Appendix B, section 3, it is not possible to conclude whether the constituents of the Substance can be expected to be homogeneous in terms of their biodegradability. Any biodegradation observed in a ready biodegradability test performed with the Substance would not be sufficient to conclude that all the constituents of the Substance are readily biodegradable. Furthermore, the information available in the registration dossier indicates that the Substance is a potential PBT/vPvB substance. As explained in ECHA Guidance R.11, in principle, degradation simulation studies performed in appropriate environmental media and at environmentally realistic conditions are the only tests that can provide a definitive degradation half-life that can be compared directly to the persistence criteria as defined in REACH Annex XIII.

Therefore, the CSA indicates the need for further degradation investigation and your adaption is rejected.

4. Degradation testing – based on the registrant's comments on the initial draft decision: Assessment of your adaptation under Annex XI, Section 2

In your comments to your initial draft decision, ECHA understands that you propose an adaptation under Annex XI, Section 2. for the following standard information requirements:

- Simulation testing on ultimate degradation in surface water (Annex IX, Section 9.2.1.2.)
- Soil simulation testing (Annex IX, Section 9.2.1.3.)
- Sediment simulation testing (Annex IX, Section 9.2.1.4.)
- Identification of degradation products (Annex IX, 9.2.3.)

We have assessed this information and identified the following issues:

Annex XI, Section 2 specifies the general rules for adapting the standard information requirement when testing is not technically possible. The guidance on the technical limitations of the test method given in the test guideline itself or in relevant guidance complementing the test guideline must always be respected.

You have provided a list of general statements to indicate why you consider testing is not technically with no specific justification of these statements:

- i. The testing of the complex UVCB is not technically possible
 - a. Relevant constituents of the Substance cannot be determined
 - b. Radiolabelling of this UVCB is not possible due to the manufacturing process and the complexity of the substance itself.

Therefore these remain unsupported hypotheses instead of justifications.

Therefore, your adaptation is rejected.

However, after the above adaptation, you have provided detailed screening assessment information with your comments on the initial draft decision covering different possibilities offered by ECHA R.11 guidelines and provided justification in this respect. ECHA understands that this screening assessment information is a Column 2 adaptation by you based on persistence, bioaccumulation and PBT assessment and as such it is addressed under the Appendix B, 3. and under Appendix C, 5. Simulation testing on ultimate degradation in surface water but it refers to all the Simulation testing requests in this decision.

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

1. Skin sensitisation

Skin sensitisation is an information requirement under Annex VII to REACH (Section 8.3.). Under Section 8.3., Column 1, the registrants must submit information allowing (1) A) a conclusion whether the substance is a skin sensitizer and B) whether it can be presumed to have the potential to produce significant sensitisation in humans (Cat. 1A), and (2) risk assessment, where required.

You have adapted this information requirement by using a Grouping of substances and read-across approach under Annex XI, Section 1.5.

You have provided the following information in support of your adaptation in the technical dossier, based on which you conclude that the Substance is not a skin sensitizer:

- i. 2010 *in vivo* Guinea Pig Maximization test with the source substance *Alkenes, C11-12, hydroformylation products, distn. Residues*; EC 292-427-6.

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

Therefore, the information requirement is not fulfilled.

In your comments to the initial draft decision, you explained that because the Substance is a UVCB and does not have a very high water solubility, the currently available *in vitro/in chemico* methods are not applicable or reliable. More specifically, you stated that DPRA (OECD 442C) which relies on molecular interactions with skin proteins for skin sensitisation have not yet been sufficiently validated for UVCBs. Furthermore, Keratinosens method (OECD TG 442D) and h-CLAT method (OECD TG 442E) have known issues regarding solubility and potential false negative results. Finally, you propose to do an OECD TG 429 study only.

OECD TG 442C

The available methods included in the OECD TG 442C (Direct Peptide Reactivity Assay (DPRA), the Amino Acid Derivative Reactivity Assay (ADRA) and the kinetic Direct Peptide Reactivity Assay (kDPRA)) are not suitable for UVCBs.

OECD TG 442D

The OECD TG 442D (2018) contains currently two different methods i.e. keratinosens (Appendix IA) and Lusens (Appendix IB). For both of the test methods following statements are given in paragraph 4 of the respective Appendices "*In general mono constituent substances with a LogP above 7 may be insoluble in the exposure medium, however, if solubility or stable dispersion can be obtained and documented, testing may still be conducted.*"

Based on the currently available methods, there are no LogP specific limitations, even if there are issues with solubility, but a stable dispersion can be obtained. If solubility limits are not met, or it not possible to obtain stable dispersion, positive results could still be validly used.

OECD TG 442E

The OECD TG 442E (2018) contains currently three methods i.e. Human Cell Line Activation test (h-CLAT), U937 cell line activation Test (U-SENS™), and Interleukin-8 Reporter Gene

Assay (IL-8 Luc assay). For the h-CLAT method only there are LogP specific limitations, as the methods states in Annex I, paragraph 4 "*Test chemicals with a Log Kow greater than 3.5 tend to produce false negative results (14). Therefore negative results with test chemicals with a Log Kow greater than 3.5 should not be considered. However, positive results obtained with test chemicals with a Log Kow greater than 3.5 could still be used to support the identification of the test chemical as a skin sensitiser.*"

The other methods do not contain LogP specific limitations, however the substance needs to be solubilised at appropriate concentrations, or to form a stable dispersion, as specified in the individual methods, which you have not addressed.

Conclusion

The current *in chemico/in vitro* test guidelines OECD TGs 442D and 442E contain multiple methods in addition to the ones indicated by you in your comments to the draft decision. You have not demonstrated that these currently available *in vitro/in chemico* methods are not suitable for the Substance in the absence of any evidence, e.g. in the form of pre-tests with suitable vehicles as described in the corresponding test guidelines.

The OECD TG 442C is not suitable for UVCBs.

To fulfil the information requirement for the Substance for skin sensitisation, *in vitro/in chemico* studies (OECD TG 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 (OECD TG 429) must be performed.

2. In vitro gene mutation study in bacteria

An *in vitro* gene mutation study in bacteria is an information requirement under Annex VII to REACH (Section 8.4.1.).

You have adapted this information requirement by using a Grouping of substances and read-across approach under Annex XI, Section 1.5.

Studies provided

You have provided in support of your adaptation the following in your dossier:

- i. 2010 *in vitro* gene mutation study in bacteria with the source substance *Alkenes, C11-12, hydroformylation products, distn. Residues*; EC 292-427-6 with the following strains, TA 98, TA 100, TA 1535, TA 1537, and E. coli WP2uvrA which all gave negative results.

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

Therefore, the information requirement is not fulfilled.

In the comments to the initial draft decision, you agree to perform the requested study.

Study design

To fulfil the information requirement for the Substance, the *in vitro* gene mutation study in

bacteria (OECD TG 471) is considered suitable.

3. Growth inhibition study aquatic plants

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

You seek to adapt the standard information requirement for growth inhibition study with aquatic plants by applying a read-across approach in accordance with Annex XI, Section 1.5 and provided the following information

- i. A key study conducted according to OECD TG 201 with use of WAF on the source substance Alchisor CAL 123.

We have assessed this information and identified the following issues:

As explained in the Appendix on Reasons common to several requests section 1, your adaptation does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. and your grouping and read-across approach is rejected.

In addition, the following endpoint-specific deficiency has been identified:

Adequacy and reliability of the source study

The corresponding test method for growth inhibition study in aquatic plants is OECD TG 201, which has the following specifications to have adequate and reliable coverage of its key parameters:

- the results of algal biomass determined in each flask at least daily during the test period are reported in a tabular form.

For the OECD TG 201 study tabulated data on the algal biomass determined daily for each treatment group and control per replicate are not reported.

Therefore, the reporting of the study is not sufficient to conduct an independent assessment of its reliability and adequateness for the classification and labelling and/or risk assessment.

On this basis, the information requirement is not fulfilled.

In the comments to the initial draft decision, you agree to perform the requested study.

Study design

The Substance is difficult to test due to its UVCB nature, poor solubility in water and volatility of some constituents, and adsorptive properties (based on the information in the registration dossier log K_{oc} of most of constituents of the Substance is >5.63). 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 solutions.

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).

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 (ECHA Guidance, 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.

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

1. In vitro cytogenicity study in mammalian cells or In vitro micronucleus study

An *in vitro* cytogenicity study in mammalian cells or an *in vitro* micronucleus study is an information requirement under Annex VIII to REACH (Section 8.4.2.).

You have adapted this information requirement by using a Grouping of substances and read-across approach under Annex XI, Section 1.5.

Studies provided

You have provided in support of your adaptation the following key study in your dossier:

- i. 2010 *in vitro* chromosomal aberration test with the source substance *Alkenes, C11-12, hydroformylation products, distn. residues*, EC 292-427-6.

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

Therefore, the information requirement is not fulfilled.

In your comments to the initial draft decision, you agree to perform the requested study.

Study design

To fulfil the information requirement for the Substance, either *in vitro* cytogenicity study in mammalian cells (Annex VIII, Section 8.4.2., test method OECD TG 473) or *in vitro* micronucleus study (Annex VIII, Section 8.4.2., test method OECD TG 487) are considered suitable.

2. In vitro gene mutation study in mammalian cells

An *in vitro* gene mutation study in mammalian cells is an information requirement under Annex VIII to REACH (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.

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.

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 sections A.3 and B.1.

The result of the requests for information in sections A.3 and B.1 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.

You have adapted this information requirement by using a Grouping of substances and read-across approach under Annex XI, Section 1.5.

You have provided in support of your adaptation the following key study in your dossier:

- i. 2010 *in vitro* Mammalian Cell Gene Mutation Test with the source substance *Alkenes, C11-12, hydroformylation products, distn. residues*, EC 292-427-6.

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

Therefore, the information requirement is not fulfilled.

In your comments to the draft decision, you agree to perform the requested study.

Study design

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.

3. Simulation testing on ultimate degradation in surface water

Further degradation testing must be considered if the chemical safety assessment (CSA) according to Annex I indicates the need to investigate further the degradation of the substance (Annex VIII, Section 9.2., Column 2).

This information requirement is triggered in case the chemical safety assessment (CSA) indicates the need for further degradation investigation (Annex I, Section 4; Annex XIII, Section 2.1), such as if the substance is a potential PBT/vPvB substance (ECHA Guidance R.11.4.). This is the case if the Substance itself or any of its constituent or impurity present in concentration $\geq 0.1\%$ (w/w) or relevant transformation/degradation product meets the following criteria:

- i. it is potentially persistent or very persistent (P/vP) if it is not possible to conclude that the Substance, any of its constituent or impurity present in concentration $\geq 0.1\%$ (w/w), or relevant transformation/degradation product is readily biodegradable. In this regard, the OECD "*Guidelines for the Testing of Chemicals, Revised Introduction to the OECD Guidelines for Testing of Chemicals, Section 3 Part I: Principles and Strategies related to the Testing of Degradation of Organic Chemicals*"⁷ indicates that ready biodegradability tests are intended for pure substances and are generally not applicable for complex compositions containing different types of constituents, typically UVCB and multiconstituent substances. For UVCB and multiconstituent substances, any observed biodegradation may indeed reflect the biodegradation only of some constituents. This OECD document further indicates that "*it is sometimes relevant to examine the ready biodegradability of mixtures of structurally similar chemicals*", but "*a case by case evaluation should however take place on whether a biodegradability test on such a complex mixture would give valuable information regarding the biodegradability of the mixture as such (i.e. regarding the degradability of all the constituents) or whether instead an investigation of the degradability of carefully selected individual components of the mixture is required*".
- ii. it is potentially bioaccumulative or very bioaccumulative (B/vB) as:
 - it has a high potential to partition to lipid storage (e.g. $\log K_{ow} > 4.5$).

Your registration dossier provides the following:

- In relation to persistence assessment:
 - Description of the Substance as a UVCB substance. Based on the information provided in the registration dossier, it contains constituents from various

⁷ <https://www.oecd-ilibrary.org/docserver/9789264030213-en.pdf?expires=1634558948&id=id&accname=guest&checksum=3C5F4AAB82C23E11087C8CBE20195342>

- chemical classes (e.g. ether-alcohols, aldols, branched and linear alcohols, diols, acetals, ethers) with various carbon chain lengths.
- a key study according to OECD TG 301B conducted with the source substance Alchisor CAL 123 on the basis of which you conclude that the Substance is readily biodegradable.
- In relation to bioaccumulation potential:
 - A number of constituents of the Substance have log Kow above 4.5 (based on log Kow information for the constituents reported in the key study, i.e. 4.2 - 8.9).
 - In the IUCLID dossier, section 2.3 and in the CSR, section 8.1.1.1.1. you indicate that *"Alchisor CAL 111 cannot be regarded as bioaccumulative in aquatic, sediment or terrestrial organisms. Reliable experimental studies with the analogue, Alchisor CAL 123, indicate that the substance is both readily biodegradable and poorly soluble. Direct and indirect exposure is therefore unlikely as the substance would not likely be bioavailable. Additional evidence (as reported in SIDS LCA Report and LCA Category for REACH) concludes that it is expected that category members will have a low potential for bioaccumulation. Therefore, based on the criteria of REACH Annex XIII, it can be concluded that Alchisor CAL 111 is not bioaccumulative (B) or very bioaccumulative (vB)." [...] "In the case of Alchisor CAL 111 and its analogue substance (Alchisor CAL 123) and category substances (Long Chain Alcohols), the substances are UVCB substances and bioaccumulation testing is not appropriate for such complex substances." [...] "The evidence seen in the literature (e. g. REACH LCA Category and SIDS LCA Report, 2006) indicates that LCAs in general and Alchisor CAL 111 are unlikely to bioaccumulate in the aquatic environment. This was confirmed by de Wolf and Parkerton (1999) who demonstrated that LCAs do not bioconcentrate because they are rapidly metabolised."*
 - In respect of the information requirement for bioaccumulation in aquatic species under Annex IX to REACH (Section 9.3.2.) in the IUCLID dossier, section 5.3.1 you provide justification for the data waiving noting that *"The log Kow of the analogue, Alchisor CAL 123, is presented as a range between 3.79 to >7.87 (with an average weighted mean value of 7.71), however it considered that secondary poisoning is unlikely to occur and the data requirement for Alchisor CAL 111 is waived on the basis of ready biodegradability, low toxicity to aquatic organisms and the absence of toxicity to mammals of the substance analogue, Alchisor CAL 123, as it is considered unlikely to cause secondary poisoning in higher organisms. No reliable measured bioconcentration information is available for Alchisor CAL 111."*
 - No information and/or justification to substantiate your claim why the Substance, any of its constituents or relevant transformation/degradation products *"cannot be regarded as bioaccumulative in aquatic, sediment or terrestrial organisms"*. The read-across justification document provided in the IUCLID dossier, section 13 does not contain justification for read-across from the source substance Alchisor CAL 123, but have a note in the Table 3 that information on bioaccumulation is 'waived' for both, the Substance and Alchisor CAL 123.
 - No information on the environmental exposure provided in the registration dossier, including CSR which would justify neither the statement that *"direct and indirect exposure of the aquatic compartment to the substance is unlikely"* nor the requirement of Annex XIII of the Reach Regulation *"Where the process and use conditions of the substance meet the conditions as specified in Section 3.2(b) or (c) of Annex XI the additional information may be omitted, and*

subsequently the substance is considered as if it is a PBT or vPvB in the registration dossier.” for all the identified uses of the Substance (including uses with high environmental, including aquatic compartment, exposure as e.g. consumer uses and professional use of cleaning agents etc.).

In your comments on the initial draft decision, you have provided further screening information, QSARs, on the P and B properties of the Substance and further assessment of this information.

We have assessed this information and identified the following issues:

Persistence assessment

The Substance is a UVCB substance. Based on the information provided in the registration dossier, it contains constituents from various chemical classes (e.g ether-alcohols, alcohols, branched and linear alcohols, diols, acetals, ethers) with various carbon chain lengths. The carbon chain length, presence of branching on the alkyl chains and of specific functional groups may have an impact on the biodegradation of the specific constituents of the Substance. Thus, the submitted information is not appropriate to assess the biodegradability of the relevant individual constituents of the Substance. Therefore, it is not possible to conclude whether the constituents of the Substance can be expected to be homogeneous in terms of their biodegradability. Any biodegradation observed in a ready biodegradability test performed with the Substance would not be sufficient to conclude that all the constituents of the Substance are readily biodegradable.

Further, in your registration dossier, you have provided no study investigating the degradability of carefully selected individual constituents of the Substance which for example, would represent worst-case in respect of degradability.

In your comments on the initial draft decision, you have provided a PBT assessment based on single branched constituents reported as representative structures.

You have provided further description of your Substance but without any analytical information.

You have concluded the Substance would not be a potential PBT/vPvB substance.

Without analytical information, it is not possible to assess any known variations of the constituents present in the composition of the Substance that may be relevant for PBT/vPvB assessment.

Without justification for the selection and without understanding of potential relevant variations of constituents, it is not possible to conclude that the selected single branched constituents are representative and to exclude constituents of higher concern for the PBT/vPvB assessment are present in the Substance, to avoid bias. In particular, considering that only the single branched constituents have been reported as representative structures, suggesting:

- that no constituents with more branching are present without substantiation.

Therefore, the available information in your registration dossier and in your comments to the draft decision, does not rule out that the Substance, any of its constituents or relevant transformation/degradation products are potentially persistent or very persistent (P/vP).

In your comments to the proposal for amendment, you have attached a document with further specifications on the manufacturing process and on the starting materials used in the manufacturing of the registered substance.

This document provides evidence that no other constituents (especially more branched) could be expected in the composition of the substance than the ones presented in the Appendix 1 of the attachment provided with your comments on the initial DD.

However, as the information is currently not available in your registration dossier, the data gap remains. You should submit this information in an updated registration dossier by the deadline set in the decision.

Bioaccumulation potential

A number of constituents of the Substance have log Kow above 4.5.

Therefore, the Substance or some of its constituents are potentially bioaccumulative or very bioaccumulative (B/vB).

Regarding your claim that "Alchisor CAL 111 cannot be regarded as bioaccumulative in aquatic, sediment or terrestrial organisms. Reliable experimental studies with the analogue, Alchisor CAL 123, indicate that the substance is both readily biodegradable and poorly soluble", you have provided no justification as why the low water solubility of the substance will have an effect on the availability for uptake of the substance.

Further, in respect of your claims that "*direct and indirect exposure of the aquatic compartment to the substance is unlikely*", that the Substance cannot be bioaccumulative, that "*bioaccumulation testing is not appropriate for such complex substances*", that "*LCAs in general and Alchisor CAL 111 are unlikely to bioaccumulate*" and that "*In accordance with REACH Annex IX, the requirement for a bioaccumulation study is waived on the basis of ready biodegradability, low toxicity to aquatic organisms and the absence of toxicity to mammals as it is considered unlikely to cause secondary poisoning in higher organisms.*":

- as explained above, your claims on exposure of the aquatic compartment and bioaccumulation are not substantiated;
- as explained above, there is no sufficient information available in the registration dossier to conclude that all the constituents of the Substance are readily biodegradable;
- In respect of feasibility of bioaccumulation testing, it should be noted that the trigger for simulation study is based on PBT/vPvB potential, and whether further bioaccumulation testing is feasible does not impact whether there is PBT/vPvB potential or not. Furthermore, ECHA Guidance R.11 on PBT assessment explain about the integrated testing strategies (ITS) for the P, B and T assessments, including specifically for the complex UVCB substances. Presented approaches foresee testing not only of the whole substance, but also of various fractions, constituents. 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. It is not justified by you why PBT/vPvB assessment and necessary testing following approaches presented in the Guidance R.11 would not be feasible.
- as explained in Appendix A, section 3, Appendix B, section 3 and Appendix C, sections 3 and 4, the short-term toxicity tests are not compliant and do not give a true measure of the aquatic toxicity for the substance, and the long-term test adaptations are rejected. Therefore, no information on long-term aquatic toxicity for the

- Substance is provided;
- as explained in Appendices C.1, C.2 and D.1, there is missing information on prenatal developmental toxicity and sub-chronic toxicity;
 - Your claim about LCA is related only to one group of constituents of the Substance which does not affect the deficiencies identified above on the data provided on the other (groups of) constituents.

Thus, there is no information to substantiate your claim in respect of bioaccumulation study.

In your comments on the initial draft decision, you have provided a PBT assessment based on single branched constituents reported as representative structures.

You have provided further description of your Substance but without any analytical information. As an example, you have reported that there is a certain percentage of unknowns in the substance but without elaborating further.

You have concluded the Substance would not be a potential PBT/vPvB substance.

You have provided further details in your comments on the proposal for amendment

The information you provided in the comments on the initial draft decision and on the proposal for amendment does change the assessment for bioaccumulation potential for the same reasons as described above under "persistence assessment".

All above considerations indicate that there is no bioaccumulation potential for the Substance, any of its constituents or relevant transformation/degradation products in line with the principles of integrated testing strategy of PBT/vPvB assessment explained in ECHA Guidance R.11.

Conclusion

The information available in your registration dossier indicates that the Substance is a potential PBT/vPvB substance.

Therefore, the chemical safety assessment (CSA) indicates the need for further degradation investigation.

The information you have provided in your comments on the initial draft decision and on the proposal for amendment addresses this concern.

However, as this information is currently not available in your registration dossier, the data gap remains. You should submit this information in an updated registration dossier by the deadline set in the decision.

The examination of the available information or adaptations, as well as the selection of the requested test and the test design are addressed respectively in Appendix C, section 5.

4. Soil simulation testing

Further degradation testing must be considered if the chemical safety assessment (CSA) according to Annex I indicates the need to investigate further the degradation of the substance (Annex VIII, Section 9.2., Column 2).

This information requirement is triggered in case the chemical safety assessment (CSA) indicates the need for further degradation investigation (Annex I, Section 4; Annex XIII,

Section 2.1), such as if the substance is a potential PBT/vPvB substance (ECHA Guidance R.11.4.).

As explained in the Appendix B, section 3 above, the information available for the Substance in your registration dossier indicates that the Substance is a potential PBT/vPvB substance. Furthermore, based on the information in the registration dossier adsorption coefficient (log K_{oc}) of constituents of the Substance is above 5.63, indicating high potential to adsorb to soil.

Therefore, the CSA indicates the need for further degradation investigation. Based on the adsorptive properties of the Substance, soil represents a relevant environmental compartment.

The examination of the available information or adaptations, as well as the selection of the requested test and the test design are addressed respectively in Appendix C, section 6.

Your comments on the initial draft decision and on the proposal for amendment for this endpoint have been addressed under Appendix B, Section 3.

5. Sediment simulation testing

Further degradation testing must be considered if the chemical safety assessment (CSA) according to Annex I indicates the need to investigate further the degradation of the substance (Annex VIII, Section 9.2., Column 2).

This information requirement is triggered in case the chemical safety assessment (CSA) indicates the need for further degradation investigation (Annex I, Section 4; Annex XIII, Section 2.1), such as if the substance is a potential PBT/vPvB substance (ECHA Guidance R.11.4.).

As explained in the Appendix B, section 3 above, the information available for the Substance in your registration dossier indicates that the Substance is a potential PBT/vPvB substance. Furthermore, based on the information in the registration dossier adsorption coefficient (log K_{oc}) of constituents of the Substance is above 5.63, indicating high potential to adsorb to sediment.

Therefore, the CSA indicates the need for further degradation investigation. Based on the adsorptive properties of the Substance, sediment represents a relevant environmental compartment.

The examination of the available information or adaptations, as well as the selection of the requested test and the test design are addressed respectively in Appendix C, section 7.

Your comments on the initial draft decision and on the proposal for amendment for this endpoint have been addressed under Appendix B, Section 3.

6. Identification of degradation products

Further degradation testing must be considered if the chemical safety assessment (CSA) according to Annex I indicates the need to investigate further the degradation of the substance (Annex VIII, Section 9.2., Column 2).

This information requirement is triggered in case the chemical safety assessment (CSA) indicates the need for further degradation investigation (Annex I, Section 4; Annex XIII,

Section 2.1), such as if the substance is a potential PBT/vPvB substance (ECHA Guidance R.11.4.).

As explained in the Appendix B, section 3 above, the information available for the Substance in your registration dossier indicates that the Substance is a potential PBT/vPvB substance.

Therefore, the chemical safety assessment (CSA) indicates the need for further degradation investigation.

The examination of the available information or adaptations, as well as further information on the selection of the approach to generate this information are addressed in Appendix C.7.

Your comments on the initial draft decision and on the proposal for amendment for this endpoint have been addressed under Appendix B, Section 3.

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

1. Sub-chronic toxicity study (90-day)

A Sub-chronic toxicity study (90 day) is a standard information requirement in Annex IX to REACH.

You have adapted this information requirement by using a Grouping of substances and read-across approach under Annex XI, Section 1.5.

To support your adaptation you have provided the following study:

- i. 2014 oral route sub-chronic (90-day) toxicity study (OECD TG 408) with the source substance *Alkenes, C11-12, hydroformylation products, distn. residues, EC 292-427-6*.

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

In the comments to the draft decision you reiterate your intention to adapt the information requirement according to Annex XI, Section 1.5. You present a strategy relying on the information on the source substance *Alkenes, C11-12, hydroformylation products, distn. Residues (EC No. 292-427-6)* and *Alkenes, C13-14, hydroformylation products, distn. residues (EC No. 292-429-7)*.

ECHA acknowledges your intentions to improve the toxicological profile of the Substance and your plans to refine your read-across approach. Please note that this decision does not consider 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). You remain responsible for complying with this decision by the set deadline.

Therefore, the information you provided in your dossier and with your comments on the draft decision do not fulfil the information requirement.

Referring to the criteria provided in Annex IX, Section 8.6.2, Column 2, the oral route is the most appropriate route of administration to investigate repeated dose toxicity.

Therefore the sub-chronic toxicity study must be performed according to the OECD TG 408, in rats and with oral administration of the Substance.

2. Pre-natal developmental toxicity study in one species

A Pre-natal developmental toxicity (PNDT) study (OECD TG 414) in one species is a standard information requirement under Annex IX to REACH.

You have adapted this information requirement by using a Grouping of substances and read-across approach under Annex XI, Section 1.5.

To support your adaptation you have provided the following studies:

- i) 2014 prenatal developmental toxicity study in rats (OECD TG 414) with the source substance *Alkenes, C11-12, hydroformylation products, distn. Residues, EC 292-427-6*;
- ii) 2002 developmental toxicity study in rats (non-TG) with the source substance *docosan-1-ol, EC 211-546-6*;
- iii) 1998 developmental toxicity study in rats (non-TG) with the source substance *C24-*

- 34 even chain alcohols;*
- iv) 1995 developmental toxicity study in rats (OECD TG 414) with the source substance *3-methylbutan-1-ol*, EC 204-633-5;

As explained in the Appendix on Reasons common to several requests your adaptation is rejected. In addition, the following endpoint-specific deficiencies have been identified in your read-across adaptation:

According to the Appendix on Reasons common to several requests, a study must have adequate and reliable coverage of the key parameters of the corresponding test guidelines, in this case OECD TG 414. The key parameter(s) of this test guideline include:

- Testing at least three dose levels and a concurrent control;
- Highest dose should aim to induce some developmental and/or maternal toxicity;
- Having 20 female animals with implantation sites for each test and control group;
- Dosing of the Substance from implantation until the day prior to scheduled caesarean section;
- Examination of the dams for weight and histopathology of the thyroid gland/thyroid hormone measurements in rodent/gravid uterus weight/uterine content/body weight of the dams/clinical signs of the dams;
- Examination of the fetuses for sex and body weight/external, skeletal and soft tissue alterations (variations and malformations)/number of resorptions and or live fetuses/measurement of anogenital distance in live rodent fetuses.

Study (ii.) does not report the number of animals used and the overall reporting is very limited, e.g. no reporting on details of examination of the dams and fetuses.

Study (iii.) has duration of the treatment gestation days 6-15, which does not cover implantation to the day prior to scheduled caesarean section.

Study (iv.) has limited reporting about the study design, including no reporting on the timing of the exposure.

Therefore, these studies (ii.-iv.) do not fulfill the conditions as foreseen in OECD TG 414.

In the comments to the initial draft decision you reiterate your intention to adapt the information requirement according to Annex XI, Section 1.5. You present a strategy relying on the information on the source substance Alkenes, C11-12, hydroformylation products, distn. Residues (EC No. 292-427-6) and Alkenes, C13-14, hydroformylation products, distn. residues (EC No. 292-429-7)).

ECHA acknowledges your intentions to improve the toxicological profile of the Substance and your plans to refine your read-across approach. Please note that this decision does not consider 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). You remain responsible for complying with this decision by the set deadline.

Therefore, the information you provided in your dossier and with your comments on the draft decision do not fulfil the information requirement.

A PNDT study according to the test method OECD TG 414 must be performed in rat or rabbit as preferred species with oral⁸ administration of the Substance.

⁸ ECHA Guidance R.7a, Section R.7.6.2.3.2.

3. 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 the following information:

- i. a justification to omit the study which you consider to be based on Annex IX, Section 9.1., Column 2. In support of your adaptation, you provided the following justification: *"In accordance with REACH Annex IX, the requirement for long-term toxicity to invertebrates is waived on the basis that the substance is readily biodegradable and has low toxicity to aquatic life. No reliable predicted or measured long-term toxicity to invertebrates data are available for Alchisor CAL 111. [...] In accordance with Column 2 of REACH Annex IX, the long-term aquatic toxicity to invertebrates study (required in Section 9.1.6) does not need to be conducted for Alchisor CAL 145 as the chemical safety assessment according to Annex I indicates that this is not necessary."*
- ii. short-term toxicity study on aquatic invertebrates

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaptation and the short-term toxicity study are rejected and information on long-term toxicity on aquatic invertebrates must be provided.

On this basis, the information requirement is not fulfilled.

In the comments to the initial draft decision, you agree to perform the requested study.

Study design

OECD TG 211 specifies that for difficult to test substances 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' under Appendix A, section 3.

4. 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 the following information:

- i. a justification to omit the study which you consider to be based on Annex IX, Section 9.1., Column 2. In support of your adaptation, you provided the following justification: *"In accordance with REACH Annex IX, the requirement for long-term toxicity to fish is waived on the basis that the substance is readily biodegradable and has low toxicity to aquatic life. No reliable predicted or measured long-term toxicity to fish data are available for Alchisor CAL 111. [...] In accordance with Column 2 of REACH Annex IX, the long-term aquatic toxicity to fish study (required in Section 9.1.6) does not need to be conducted for Alchisor CAL 111 as the chemical safety assessment according to Annex I indicates that this is not necessary."*
- ii. short-term toxicity study on fish

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaptation

and the short-term toxicity study are rejected and information on long-term toxicity on fish must be provided.

On this basis, the information requirement is not fulfilled.

In the comments to the initial draft decision, you agree to perform the requested study.

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.).

OECD TG 210 specifies that for difficult to test substances 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' under Appendix A, section 3.

5. Simulation testing on ultimate degradation in surface water

Simulation testing on ultimate degradation in surface water is an information requirement under Annex IX to REACH (Section 9.2.1.2.).

You have provided the following information:

- an adaptation under Annex IX, Section 9.2., Column 2 with the following justification: "*the study does not need to be conducted because the substance is readily biodegradable*".

We have assessed this information and identified the following issue:

As explained in the Appendix on Reasons common to several requests your adaption is rejected.

In your comments to the initial draft decision, ECHA understands that you propose

1. An adaptation claiming that testing does not appear scientifically necessary because the Substance would not be a potential PBT substance.
2. An adaptation under Annex XI, Section 2 specifies the general rules for adapting the standard information requirement when testing is not technically possible.

Testing not scientifically necessary

We understand that you submit an adaptation under Column 2 of Section 9.2 of Annex IX according to which testing can be adapted if the chemical safety assessment does not indicate the need for further investigation.

However, this legal basis is a ground for requesting studies beyond the studies covered by the information requirements of Column 1. It is not a ground for adapting the latter studies. Therefore, your adaptation is rejected.

Testing technically not possible

Regarding your adaptation under Annex XI, Section 2, we have assessed this information and as explained in Section 4 of the Appendix on Reasons common to several requests, it is rejected.

On this basis, the information requirement is not fulfilled.

Study design

Simulation degradation studies must include two types of investigations (ECHA Guidance R.7.9.4.1.):

- 1) a degradation pathway study where transformation/degradation products are quantified and, if relevant, are identified, and
- 2) a kinetic study where the degradation rate constants (and degradation half-lives) of the parent substance and of relevant transformation/degradation products are experimentally determined.

You must perform the test, by following the pelagic test option with natural surface water containing approximately 15 mg dw/L of suspended solids (acceptable concentration between 10 and 20 mg dw/L) (ECHA Guidance R.11.4.1.1.3.).

The required test temperature is 12°C, which corresponds to the average environmental temperature for the EU (ECHA Guidance R.16, Table R.16-8) and is in line with the applicable test conditions of the OECD TG 309.

As specified in ECHA Guidance R.7.9.4.1., the organic carbon (OC) concentration in surface water simulation tests is typically 2 to 3 orders of magnitude higher than the test substance concentration and the formation of non-extractable residues (NERs) may be significant in surface water tests. Therefore, non-extractable residues (NER) must be quantified. The reporting of results must include a scientific justification of the used extraction procedures and solvents. By default, total NER is regarded as non-degraded Substance. However, if reasonably justified and analytically demonstrated a certain part of NER may be differentiated and quantified as irreversibly bound or as degraded to biogenic NER, such fractions could be regarded as removed when calculating the degradation half-life(s) (ECHA Guidance R.11.4.1.1.3.). Further recommendations may be found in the background note on options to address non-extractable residues in regulatory persistence assessment available on the ECHA website.

Relevant transformation/degradation products are at least those detected at $\geq 10\%$ of the applied dose at any sampling time or those that are continuously increasing during the study even if their concentrations do not exceed 10% of the applied dose, as this may indicate persistence (OECD TG 309; ECHA Guidance R.11.4.1.).

6. Soil simulation testing

Soil simulation testing is an information requirement under Annex IX to REACH (Section 9.2.1.3.) for substances with a high potential for adsorption to soil.

You have provided the following information:

- an adaptation under Annex IX, Section 9.2., Column 2 with the following justification: "*the study does not need to be conducted because the substance is readily biodegradable*".

We have assessed this information and identified the following issues:

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

Furthermore, based on the information in the registration dossier adsorption coefficient (log K_{oc}) of constituents of the Substance is above 5.63, indicating high potential to adsorb to soil.

In your comments to the initial draft decision, ECHA understands that you propose

1. An adaptation claiming that testing does not appear scientifically necessary because the Substance would not be a potential PBT substance.
2. An adaptation under Annex XI, Section 2 specifies the general rules for adapting the standard information requirement when testing is not technically possible.

Testing not scientifically necessary

We understand that you submit an adaptation under Column 2 of Section 9.2 of Annex IX according to which testing can be adapted if the chemical safety assessment does not indicate the need for further investigation.

However, this legal basis is a ground for requesting studies beyond the studies covered by the information requirements of Column 1. It is not a ground for adapting the latter studies. Therefore, your adaptation is rejected.

Testing technically not possible

Regarding your adaptation under Annex XI, Section 2, we have assessed this information and as explained in Section 4 of the Appendix on Reasons common to several requests, it is rejected.

On this basis, the information requirement is not fulfilled.

Study design

Simulation degradation studies must include two types of investigations (ECHA Guidance R.7.9.4.1):

- 1) a degradation pathway study where transformation/degradation products are quantified and, if relevant, are identified, and
- 2) a kinetic study where the degradation rate constants (and degradation half-lives) of the parent substance and of relevant transformation/degradation products are experimentally determined.

In accordance with the specifications of OECD TG 307, you must perform the test using at least four soils representing a range of relevant soils (*i.e.* varying in their organic content, pH, clay content and microbial biomass).

The required test temperature is 12°C, which corresponds to the average environmental temperature for the EU (ECHA Guidance R.16, Table R.16-8) and is in line with the applicable test conditions of the OECD TG 307.

In accordance with the specifications of OECD TG 307, non-extractable residues (NER) must be quantified. The reporting of results must include a scientific justification of the used extraction procedures and solvents (ECHA Guidance R.7.9.4.1.). By default, total NER is regarded as non-degraded Substance. However, if reasonably justified and analytically demonstrated a certain part of NER may be differentiated and quantified as irreversibly bound or as degraded to biogenic NER, such fractions could be regarded as removed when calculating the degradation half-life(s) (ECHA Guidance R.11.4.1.1.3.). Further recommendations may be found in the background note on options to address non-extractable residues in regulatory persistence assessment available on the ECHA website.

Relevant transformation/degradation products are at least those detected at $\geq 10\%$ of the applied dose at any sampling time or those that are continuously increasing during the study

even if their concentrations do not exceed 10% of the applied dose, as this may indicate persistence (OECD TG 307; ECHA Guidance R.11.4.1.).

7. Sediment simulation testing

Sediment simulation testing is an information requirement under Annex IX to REACH (Section 9.2.1.4.) for substances with a high potential for adsorption to sediment.

You have provided the following information:

- an adaptation under Annex IX, Section 9.2., Column 2 with the following justification: "*the study does not need to be conducted because the substance is readily biodegradable*".

We have assessed this information and identified the following issues:

As explained in the Appendix on Reasons common to several requests your adaptation is rejected.

Furthermore, based on the information in the registration dossier adsorption coefficient (log K_{oc}) of constituents of the Substance is above 5.63, indicating high potential to adsorb to sediment.

In your comments to the initial draft decision, ECHA understands that you propose

1. An adaptation claiming that testing does not appear scientifically necessary because the Substance would not be a potential PBT substance.
2. An adaptation under Annex XI, Section 2 specifies the general rules for adapting the standard information requirement when testing is not technically possible.

Testing not scientifically necessary

We understand that you submit an adaptation under Column 2 of Section 9.2 of Annex IX according to which testing can be adapted if the chemical safety assessment does not indicate the need for further investigation.

However, this legal basis is a ground for requesting studies beyond the studies covered by the information requirements of Column 1. It is not a ground for adapting the latter studies. Therefore, your adaptation is rejected.

Testing technically not possible

Regarding your adaptation under Annex XI, Section 2, we have assessed this information and as explained in Section 4 of the Appendix on Reasons common to several requests, it is rejected.

On this basis, the information requirement is not fulfilled.

Study design

Simulation degradation studies must include two types of investigations (ECHA Guidance R.7.9.4.1.):

- 1) a degradation pathway study where transformation/degradation products are quantified and, if relevant, are identified, and
- 2) a kinetic study where the degradation rate constants (and degradation half-lives) of the parent substance and of relevant transformation/degradation products are experimentally determined.

In accordance with the specifications of OECD TG 308, you must perform the test using two sediments. One sediment should have a high organic carbon content (2.5-7.5%) and a fine texture, the other sediment should have a low organic carbon content (0.5-2.5%) and a coarse texture. If the Substance may also reach marine waters, at least one of the water-sediment systems should be of marine origin.

The required test temperature is 12°C, which corresponds to the average environmental temperature for the EU (ECHA Guidance R.16, Table R.16-8) and is in line with the applicable test conditions of the OECD TG 308.

In accordance with the specifications of OECD TG 308, non-extractable residues (NER) must be quantified. The reporting of results must include a scientific justification of the used extraction procedures and solvents (ECHA Guidance R.7.9.4.1.). By default, total NER is regarded as non-degraded Substance. However, if reasonably justified and analytically demonstrated a certain part of NER may be differentiated and quantified as irreversibly bound or as degraded to biogenic NER, such fractions could be regarded as removed when calculating the degradation half-life(s) (ECHA Guidance R.11.4.1.1.3.). Further recommendations may be found in the background note on options to address non-extractable residues in regulatory persistence assessment available on the ECHA website.

Relevant transformation/degradation products are at least those detected at $\geq 10\%$ of the applied dose at any sampling time or those that are continuously increasing during the study even if their concentrations do not exceed 10% of the applied dose, as this may indicate persistence (OECD TG 308; ECHA Guidance R.11.4.1.).

8. Identification of degradation products

Identification of degradation products is an information requirement under Annex IX to REACH (Section 9.2.3.).

You have provided no information on the identity of transformation/degradation products for the Substance.

As explained in Appendix B, section 3, it is not possible to conclude whether the constituents of the Substance can be expected to be homogeneous in terms of their biodegradability. Any biodegradation observed in a ready biodegradability test performed with the Substance would not be sufficient to conclude that all the constituents of the Substance are readily biodegradable. Furthermore, the information available in the registration dossier indicates that the Substance is a potential PBT/vPvB substance.

Therefore, the CSA indicates the need for further degradation investigation.

In your comments to the initial draft decision, ECHA understands that you propose

1. An adaptation claiming that testing does not appear scientifically necessary because the Substance would not be a potential PBT substance.
2. An adaptation under Annex XI, Section 2 specifies the general rules for adapting the standard information requirement when testing is not technically possible.

Testing not scientifically necessary

We understand that you submit an adaptation under Column 2 of Section 9.2 of Annex IX according to which testing can be adapted if the chemical safety assessment does not indicate the need for further investigation.

However, this legal basis is a ground for requesting studies beyond the studies covered by the information requirements of Column 1. It is not a ground for adapting the latter studies. Therefore, your adaptation is rejected.

Testing technically not possible

Regarding your adaptation under Annex XI, Section 2, we have assessed this information and as explained in Section 4 of the Appendix on Reasons common to several requests, it is rejected.

On this basis, the information requirement is not fulfilled.

Study design

Regarding the selection of appropriate and suitable test method(s), the method(s) will have to be substance-specific. Identity, stability, behaviour, and molar quantity of the degradation/transformation products relative to the Substance must be evaluated and reported, when analytically possible. In addition, degradation half-life, log K_{ow} and potential toxicity of the transformation/degradation may need to be investigated. You may obtain this information from the degradation studies requested in Appendices B and C, sections 3-5 and 5-7 respectively or by some other measure. If any other method is used for the identification of the transformation/degradation products, you must provide a scientifically valid justification for the chosen method.

To determine the degradation rate of the Substance, the requested study according to OECD TG 309 (Appendices B and C, sections 3 and 5 respectively) must be conducted at 12°C and at a test concentration < 100 µg/L. However, to overcome potential analytical limitations with the identification and quantification of major transformation/degradation products, you may consider running a parallel test at higher temperature (but within the frame provided by the test guideline, e.g. 20°C) and at higher application rate (i.e. > 100 µg/L).

To determine the degradation rate of the Substance, the requested studies according to OECD TG 308 and 307 (Appendices B and C, sections 4-5 and 6-7 respectively) must be conducted at 12°C and at a test material application rates reflecting realistic assumptions. However, to overcome potential analytical limitations with the identification and quantification of major transformation/degradation products, you may consider running a parallel test at higher temperature (but within the frame provided by the test guideline) and at higher application rate (e.g. 10 times).

Appendix D: Reasons to request information required under Annex X of REACH

1. Pre-natal developmental toxicity study in a second species

Pre-natal developmental toxicity (PNDT) studies (OECD TG 414) in two species is a standard information requirement under Annex X to REACH.

ECHA understands that you submitted a weight-of-evidence adaptation under Annex XI, Section 1.2 of REACH and concluded: *"In accordance with Section 1 of Annex IX, a developmental toxicity study in rabbits (as required in Section 8.7.2) is scientifically unjustified."* You justify your waiver by stating that there has not been indications of developmental toxicity in rats, the small amounts of absorption will be rapidly metabolised in vivo, the metabolism would be expected to be similar in rats and rabbits meaning a developmental toxicity study conducted in rabbits could be expected to have the same result as a rat study and, finally, there has been no evidence of developmental effects in rabbits with source substances.

You have provided the following sources of information in rabbit:

- i. 2002 Prenatal Developmental Toxicity Study in rabbits (Similar to OECD TG 414) on source substance Docosan-1-ol, EC 211-546-6.
- ii. 1995 Prenatal Developmental Toxicity Study in rabbits (OECD TG 414) on source substance 3-methylbutan-1-ol EC 204-633-5.
- iii. 1998 Developmental Toxicity study in rabbits (Non-TG) on source substance C24-34 even chain alcohols.

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

Annex XI, Section 1.2 states that there may be sufficient weight of evidence weight of evidence from several independent sources of information leading to assumption/conclusion that a substance has or has not a particular dangerous (hazardous) property, while information from a single source alone is insufficient to support this notion.

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. 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 that the Substance has or has not the (dangerous) property investigated by the required study.

In order to allow concluding on prenatal developmental toxicity in two species for the Substance in a weight of evidence adaptation, the justification must cover the key elements foreseen to be investigated in an OECD TG 414 study in two species. The following aspects of this guideline include: 1) prenatal developmental toxicity in two species, 2) maternal toxicity in two species, and 3) maintenance of pregnancy in two species.

ECHA has assessed to what extent the information submitted enables a conclusion of hazardous properties for prenatal developmental toxicity in a second species and identified the following deficiencies:

While the sources of information (i.-iii.) provide relevant information on prenatal developmental toxicity, maternal toxicity and maintenance of pregnancy, these sources of information have the following deficiencies affecting their reliability.

First, the conditions of OECD TG 414 include having 20 female animals with implantation sites for each test and control group and exposure duration from implantation to the day prior to scheduled caesarean section.

Study (i.) had duration of treatment during days 6-19 of gestation as the termination was on day 29 of gestation. Study (ii.) had duration of treatment during gestation days 7 to 19 and only 15 pregnant females per dose level. Study (iii.) had duration of treatment during days 6-18 of gestation and only 16 pregnant animals in low dose group and 17 in mid dose group. Therefore, these studies do not fulfil the conditions as foreseen in OECD TG 414.

Second, as explained in the Appendix on reasons common to several requests, the reported read-across approach does not fulfil the criteria in Annex XI, Section 1.5. Therefore, studies (i. - iii.) cannot be used as part of weight of evidence adaptation according to Annex XI, Section 1.2.

Therefore, the sources of information (i) to (iii) provide information on prenatal developmental toxicity, maternal toxicity and maintenance of pregnancy in a second species but that information is not reliable.

In conclusion, none of the provided sources of information alone or together allows to conclude whether the Substance has or has not hazardous properties related to prenatal developmental toxicity in a second species. Therefore, your adaptation is rejected and the information requirement is not fulfilled.

Based on the above, the information you provided do not fulfil the information requirement.

In your comments to the initial draft decision, you acknowledge that Pre-natal developmental toxicity study in two species is a standard information requirement for A.X registrations and that your technical dossier does not contain such a study. You propose using read-across adaptation from source substance (EC#292-427-6) which will be tested in OECD TG 414 in rabbit.

Despite of accepting the legal requirement of the study, you however challenge the scientific justification for the request. In fact, you refer to several references in scientific literature (eg. RIVM, 2008; Janer et al, 2008; Hurr et al, 2003; van Racenzwaay et al, 2012) to question the added value of the rabbit and claiming the rabbit not being more sensitive than rats.

Furthermore, you refer to ECHA Guidance which concludes that the prenatal developmental test when performed on two species is usually sufficient for drawing a reliable conclusion on reproductive toxicity properties. Also you refer to the consultation phase of ECHA Guidance and note that despite of critical stakeholder comments, ECHA has not changed their position and a PNDT in two species is a standard information requirement in REACH Annex X.

Firstly, Pre-natal developmental toxicity study in two species is a legal information requirement at Annex X and your dossier has a data gap. Furthermore, ECHA Guidance merely supports the interpretation of the legal text. The major purpose of a PNDT study is to identify prenatal developmental hazard and if identified, classify accordingly following the criteria of the CLP Regulation.

Secondly, despite of some statements that for reviewed substances the added value of the rabbit was limited, the combination of rat and rabbit study will increase the probability of identifying developmental toxicity as compared to a single species study (Janer et al, 2008; Hurtt et al, 2003). Before conducting a study, one cannot know which species is more sensitive as no single species has been shown to be most predictive of a human teratogen

(Hurtt et al, 2003). This supports why the rabbit data may have added value when performing hazard assessment of individual substances and clarify their intrinsic properties and further, in weight of evidence approach when considering classification.

Information on study design

A PNDT study according to the OECD TG 414 study should be performed in the rabbit or rat as the preferred second species, depending on the species tested in the first PNDT study (request C.2 in this decision).

The study shall be performed with oral⁹ administration of the Substance.

⁹ ECHA Guidance R.7a, Section R.7.6.2.3.2.

Appendix E: 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 summaries¹⁰.

B. 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 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.

Technical instructions on how to report the above is available in the manual on How to prepare registration and PPORD dossiers¹¹.

¹⁰ <https://echa.europa.eu/practical-guides>

¹¹ <https://echa.europa.eu/manuals>

Appendix F: General recommendations when conducting and reporting new tests for REACH purposes

A. Strategy for the PBT/vPvB assessment

Under Annex XIII, the information must be based on data obtained under conditions relevant for the PBT/vPvB assessment. You must assess the PBT properties of each relevant constituent of the Substance present in concentrations at or above 0.1% (w/w) and of all relevant transformation/degradation products. Alternatively, you would have to justify why you consider these not relevant for the PBT/vPvB assessment.

You are advised to consult ECHA Guidance R.7b (Section R.7.9.), R.7c (Section R.7.10) and R.11 on PBT assessment to determine the sequence of the tests needed to reach the conclusion on PBT/vPvB and potential alternative testing strategies. The guidance provides advice on 1) integrated testing strategies (ITS) for the P, B and T assessments and 2) the interpretation of results in concluding whether the Substance fulfils the PBT/vPvB criteria of Annex XIII.

In particular, you are advised to first conclude whether the Substance fulfils the Annex XIII criteria for P and vP. When determining the sequence of degradation testing you are advised to consider the intrinsic properties of the Substance, its identified uses and release patterns as these could significantly influence the environmental fate of the Substance. You must revise your PBT assessment when the new information is available.

B. Environmental testing for substances containing multiple constituents

Your Substance contains multiple constituents and, as indicated in ECHA Guidance R.11 (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.

Appendix G: Procedure

The information requirement for an Extended one-generation reproductive toxicity study (EOGRTS; Annexes IX or X, Section 8.7.3.) is not addressed in this decision. This may be addressed in a separate decision once the information from the Sub-chronic toxicity study (90-day) requested in the present decision is provided; due to the fact that the results from the 90-day study is needed for the design of the EOGRTS. Similarly the information requirement for a Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.) is not addressed in this decision; as the EOGRTS will cover the same parameters.

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 13 August 2020.

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

ECHA took into account your comments and amended the request for skin sensitisation.

The deadline to provide the requested information was amended to 30 months for several requests, to align with other decisions for related substances.

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

ECHA received proposal(s) for amendment and modified the draft decision.

ECHA invited you to comment on the proposed amendment(s) and referred the modified draft decision to the Member State Committee.

Your comments on the proposed amendment were taken into account by the Member State Committee.

The Member State Committee reached a unanimous agreement on the draft decision in its MSC-77 written procedure and ECHA took the decision according to Article 51(6) of the REACH Regulation.

Appendix H: List of references - ECHA Guidance¹² and other supporting documentsEvaluation 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)¹³

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

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 documents¹⁴

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

¹² <https://echa.europa.eu/guidance-documents/guidance-on-information-requirements-and-chemical-safety-assessment>

¹³ <https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across>

¹⁴ <http://www.oecd.org/chemicalsafety/testing/series-testing-assessment-publications-number.htm>

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 I: Addressees of this decision and their corresponding information requirements

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
████████████████████	████████████████████	██████

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.