

Helsinki, 01 February 2022

Addressees

Registrant(s) of JS_related CAS 25749-64-8 as listed in the last Appendix of this decision

Date of submission of the dossier subject to this decision

05/06/2019

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

Substance name: 2-Propyn-1-ol, reaction product with 1-2.5 moles of oxirane

EC number: 941-793-1

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 below, by the deadline of **9 May 2023**.

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.)
 - i. in vitro/in chemico skin sensitisation information on molecular interactions with skin proteins (OECD TG 442C), inflammatory response in keratinocytes (OECD TG 442D) and activation of dendritic cells (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. Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.; test method: EU C.2./OECD TG 202)
4. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.; test method: EU C.3./OECD TG 201)
5. Ready biodegradability (Annex VII, Section 9.2.1.1.; test method: OECD TG 301A/B/C/D/E/F or OECD TG 310).

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

1. In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.; test method: OECD TG 476 or TG 490)

2. 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)
3. Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.; test method: EU B.63/OECD TG 421 or EU B.64/OECD TG 422) by oral route, in rats
4. Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.; test method: OECD TG 203).

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 VIII of REACH", respectively.

Information required depends on your tonnage band

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

- the information specified in Annex VII to REACH, for registration at [REDACTED] or as a transported isolated intermediate in quantity [REDACTED];
- the information specified in Annexes VII and VIII to REACH, for registration at [REDACTED]

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

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". For references used in this decision, please consult the Appendix entitled "List of references".

Appeal

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

Failure to comply

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

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.

i. Assessment of the Grouping of substances and read-across approach, in light of the requirements of 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:

- Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.)
- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)
- In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.)
- Skin sensitisation (Annex VII, Section 8.3.)
- In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.)
- In vitro cytogenicity study in mammalian cells or In vitro micronucleus study (Annex VIII, Section 8.4.2.)
- Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.;)

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 Guidance² and related documents^{3, 4}.

A. Predictions for (eco)toxicity

You have provided a read-across justification document in IUCLID Section 13. According to that document the target is 2-Propyn-1-ol, compd. with ethylene oxide (CAS 25749-64-8) and the source substance is 2-Propyn-1-ol, compd. with methyloxirane (CAS 38172-91-7).

In your comments on the draft decision you clarify the substance identification of the target substance. You have pointed out that "*In the justification document we were using the old substance identification common before introducing REACH regulation in 2007. For target substance identification, we are currently using CAS number 25749-64-8 and name 2-Propyn-1-ol, compd. with ethylene oxide, instead of the correct and more precise UVCB name 2-*

² Guidance on information requirements and chemical safety assessment Chapter R.6: QSARs and grouping of Chemicals. 2008 (May) ECHA, Helsinki. 134. pp. Available online: https://echa.europa.eu/documents/10162/13632/information_requirements_r6_en.pdf/77f49f81-b76d-40ab-8513-4f3a533b6ac9

³ 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)

⁴ 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>

Propyn-1-ol, reaction product with 1-2.5 moles of oxirane and EC number 941-793-1."

Therefore, after confirming the sameness of these two substances, we conclude that your read-across justification document addresses the target substance, and have revised this decision accordingly.

In regard of the study records you provided it is considered that your read-across is between the structurally similar substances, Reaction product of 2-Propyn-1-ol with methyloxirane, EC No. 609-530-2 (CAS No. 38172-91-7) as source substance and the Substance as target substance.

You have provided the following reasoning for the prediction of (eco)toxicological properties: "the similarity is justified on basis molecular structure, physico-chemical properties and toxicological profile, supported by QSAR calculation".

ECHA understands that you predict the (eco)toxicological 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 shortcoming(s) with regards to prediction(s) of ecotoxicological properties.

1. Adequacy and reliability of source studies for (eco-)toxicity

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).

In the technical dossier for the aquatic toxicity endpoints you have provided the following study records for the source substance Reaction product of 2-Propyn-1-ol with methyloxirane, EC No. 609-530-2 (CAS No. 38172-91-7):

- Short-term daphnia study conducted according to OECD TG 202 (2013)
- Algae study conducted according to OECD TG 201 (2013)
- Combined repeated dose toxicity with the screening for reproductive/developmental toxicity study OECD TG 422 (2013)

As explained in requests A3 – 4 below, neither OECD TG 202 or 201 studies provide an adequate coverage of some key parameters expected to be investigated in a study performed according to the OECD TG 202 and 201 respectively. Therefore, the data provided does not allow an independent assessment of the validity and reliability of these studies and their results for use in hazard assessment, as well as for the purpose of classification and labelling.

As explained in request B.4, the dose selection does not fulfil the criteria of OECD TG 421/422, since it did not reach the limit dose in absence of toxicity, but not severe suffering or death.

Consequently currently there are no aquatic and reproductive toxicities studies available which are considered adequate and reliable as source studies.

2. Missing bridging study to compare properties (eco)toxicity

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*”⁵. 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 must include supporting information/bridging studies to compare properties of the Substance and source substances.

In the technical dossier for the aquatic toxicity, you have submitted one study only on short-term fish with the Substance (1979) performed according to DIN 38412 part 15.

For the reasons provided in request B-5 below this study is not adequate to conclude on aquatic toxicity on the Substance.

Consequently, currently there are no aquatic toxicity studies on the Substance available which are considered adequate and reliable.

Furthermore, you have not submitted any bridging studies in the scope of the endpoints for which you seek to adapt via read-across (e.g. reproductive toxicity) conducted with the Substance to compare the toxic properties of the source and target substances.

In the absence of valid bridging studies on the Substance, you have not established that the Substance and of the source substance are likely to have similar (eco)toxic properties. Therefore you have not provided sufficient supporting information to strengthen the rationale for the read-across.

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.

ii. Assessment of the Qualitative or quantitative structure-activity relationships adaptations, in light of the requirements of Annex XI, Section 1.3

You have adapted the following standard information requirements by using data derived from Qualitative or quantitative structure-activity relationship (QSAR) in accordance with Annex XI, Section 1.3:

- Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.)
- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)

Annex XI, Section 1.3. states that results obtained from valid QSAR models may be used instead of testing when the following cumulative conditions are met, in particular:

1. the substance falls within the applicability domain of the QSAR model;
2. adequate and reliable documentation of the applied method is provided;
3. the results are adequate for classification and labelling and/or risk assessment.

According to ECHA’s Practical guide “How to use and report (Q)SARs”, section 3.4, a QSAR

⁵ Guidance on information requirements and chemical safety assessment Chapter R.6: QSARs and grouping of Chemicals, Section R.6.2.2.1.f

Model Reporting Format (QMRF) and a QSAR Prediction Reporting Format (QPRF) are required

- to establish the scientific validity of the model;
- to verify that the Substance falls within the applicability domain of the model; and
- to assess the adequacy of the prediction for the purposes of classification and labelling.

You have provided a QSAR prediction for short-term daphnia and algae endpoints, concluding that the most toxic constituent (1 mole EO) substance has 48hr EC₅₀ of 36273 mg/L (nominal) and 96hr EC₅₀ of 2539mg/L (nominal) for daphnia and algae respectively.

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

You have not provided any documentation for the QSAR prediction. In particular, you have not included a QMRF and/or a QPRF in your technical dossier.

Therefore, ECHA cannot establish whether the model is scientifically valid, whether the Substance falls within the applicability domain of the model, and whether the results are adequate for classification and labelling and/or risk assessment.

In addition, based on ECHA's in-house assessment, the corresponding input substance class (porpargyl ethers) for the constituents of the Substance has a poor training set with no more than four structural analogues in the training set. All substances are outside of the applicability domain of the model. Therefore according to the criteria from Annex XI, Section 1.3, these predictions cannot be considered as valid and adequate for fulfilling the information requirement.

The adaptation you provided does not fulfil the criteria specified in Annex XI, Section 1.3. and it is therefore rejected.

iii. Assessment of the weight-of-evidence adaptations, in light of the requirements of Annex XI, Section 1.2.

You have adapted the following standard information requirements according to Annex XI, Section 1.2. Weight of evidence of REACH:

- Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.)
- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)

Annex XI, Section 1.2 states that there may be sufficient weight of evidence (WoE) 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.4.4, a WoE adaptation involves an assessment of the relative values/weights of different pieces of the available information which is defined by e.g. the reliability of the data, consistency of results/data, nature and severity of effects, and relevance of the information for the given regulatory endpoint. Subsequently, the lines of evidence should be integrated considering their relative values or weights in order to draw a conclusion. Adequate and reliable documentation shall be provided to describe your WoE approach, the assessment of relative weights of individual piece of information and the subsequent conclusions drawn.

You have provided the following information for this WoE adaptation:

1. experimental studies according to guideline 201 (2013) and 202 (2013) on an analogue substance;
2. read-across adaptation based on analogue substance 2-Propyn-1-ol with methyloxirane, EC No. 609-530-2, "Rationale & justification for the analogue read-across approach used in the registration dossier of 2-Propyn-1-ol, compd. With

- ethylene oxide”;
3. a QSAR prediction based on ECOSAR v.1.00.

You have not included a justification for your WoE adaptation, which would include an assessment of relative weights of the individual pieces of information and the subsequent conclusions drawn. However, ECHA has evaluated the individual pieces of information separately below.

Regarding points 1 & 2, read-across adaptation can be used to adapt the standard information requirement, provided that the criteria in Annex XI, Section 1.5. are fulfilled. As explained in section (i) above, the reported read-across approach does not fulfil the criteria in Annex XI, Section 1.5. Therefore, it cannot be used as part of weight of evidence adaptation according to Annex XI, Section 1.2.

Regarding point 3, a QSAR prediction can be used to adapt the standard information requirement, provided that the criteria in Annex XI, Section 1.3. are fulfilled. As explained section (ii) above, the reported QSAR prediction does not fulfil the criteria in Annex XI, Section 1.3. Therefore, it cannot be used as part of weight of evidence adaptation according to Annex XI, Section 1.2.

Based on the assessment above, it is not possible to conclude, based on any source of information alone or considered together, whether your Substance has or has not the particular dangerous property foreseen to be investigated in OECD TG 201 and 202 studies, as well as QSAR predictions. Your adaptation is rejected and the information requirement is not fulfilled.

Appendix A: Reasons to request information required under Annex VII of REACH**1. Skin sensitisation (Annex VII, Section 8.3.)**

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

- i. *In vivo* Local Lymph Node Assay OECD TG 429 with the analogue substance 2-Propyn-1-ol, compound with methyloxirane, (CAS 38172-91-7) 2012.

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

ECHA has considered the scientific and regulatory validity of your read-across approach(es) in the Appendix "Reasons common to several requests", and found that your read-across adaptation is not acceptable.

In your comments on the draft decision, you refer to studies made with the source substance and to "missing" read-across information/justification. Concerning the justification document, we have addressed your comment above in the Appendix "Reasons common to several requests" (Section i.). We consider that your read-across remains unacceptable as explained above. Therefore, we have not amended the draft decision on this request.

Study design

To fulfil the information requirement for the Substance for skin sensitisation, *in vitro/in chemico* studies (OECD TG 442C, OECD TG 442D and EU Method B.71/OECD TG 442E) are considered suitable. In case *in vitro/in chemico* methods are not suitable for the Substance or the results cannot be used for classification and risk assessment an *in vivo* skin sensitisation study must be performed and the murine local lymph node assay (LLNA) (EU Method B.42/OECD TG 429) is considered as the appropriate study.

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 provided a key study in your dossier:

- i. Ames test OECD 471 with an analogue substance 2-Propyn-1-ol, compound with methyloxirane, reliability 1, made in 1995, according to GLP, with the following strains, TA 1535, TA 100, TA 1537, TA 98, which all gave negative results.

We have assessed this information and identified the following issue:

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

ECHA has considered the scientific and regulatory validity of your read-across approach(es) above in the Appendix "Reasons common to several requests", and found that your read-across adaptation is not acceptable.

To fulfil the information requirement, the study has to meet the requirements of OECD TG 471⁶ (1997). One of the key parameters of this test guideline includes:

The test must be performed with 5 strains: four strains of *S. typhimurium* (TA98; TA100; TA1535; TA1537 or TA97a or TA97) and one strain which is either *S. typhimurium* TA102 or *E. coli* WP2 uvrA or *E. coli* WP2 uvrA (pKM101)

The reported data for the study you have provided did not include:

the required fifth strain, *S. typhimurium* TA102 or *E. coli* WP2 uvrA or *E. coli* WP2 uvrA (pKM101).

The information provided does not cover one of the key parameters required by OECD TG 471.

Therefore, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to perform the OECD TG 471 with the Substance.

Study design

To fulfil the information requirement for the Substance, the *in vitro* gene mutation study in bacteria (OECD TG 471) should be performed using one of the following strains: *E. coli* WP2 uvrA, or *E. coli* WP2 uvrA (pKM101), or *S. typhimurium* TA102.

3. Short-term toxicity testing on aquatic invertebrates

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

You have adapted this information requirement by using:

- i. a Grouping of substances and read-across approach under Annex XI, Section 1.5. based on OECD TG 202 study (2013) with an analogue substance (weight of evidence), and
- ii. by using data derived from Qualitative or quantitative structure-activity relationship (QSAR) in accordance with Annex XI, Section 1.3 with the Substance (weight of evidence, ECOSAR v1.00, 2014)
- iii. WoE adaptation:
 - a. experimental studies according to guideline 202 (2013) on an analogue substance;
 - b. read-across adaptation based on analogue substance 2-Propyn-1-ol with methyloxirane, EC No. 609-530-2, "Rationale & justification for the analogue read-across approach used in the registration dossier of 2-Propyn-1-ol, compd. With ethylene oxide";
 - c. a QSAR prediction based on ECOSAR v.1.00.

As explained in the Appendix on "Reasons common to several requests", sections (i), (ii) and (iii), your adaptations are rejected.

In addition we have identified the following deficiency with the study (2013):

⁶ ECHA Guidance R.7a, Table R.7.7-2, p.557

Under Articles 3(28) and 10(a)(vii) and Annex I, Section 3.1.5. of REACH, a robust study summary must be provided for the study/ies giving rise to the highest concern. A robust study summary must cover critical information and allow an assessment of the validity and reliability of the study. For a study conducted according to OECD 202, it includes:

- a description of test conditions, including number of daphnids per vessels, number of test vessels per concentration;
- a description of the preparation of test solutions, including the justification on the deviation from the TG (i.e. use of a solvent (dimethylformamide) for water soluble substance (reported WS of the Substance is 225 mg/L));
- a full description of the analytical monitoring method (e.g. calibration, recovery and sensitivity determination) and of the preparation of the test samples for analysis (including the description of filtration and/or extraction steps, if any);

You provided the information on test material, the test guideline followed, EC₅₀ value at 48 h and conclusion. You also indicated that analytical monitoring was performed and that validity criteria were fulfilled. However, in the study summary (2013), you did not provide the above listed critical elements.

Therefore, the data provided does not allow an independent assessment of the validity and reliability of this study and its results for use in hazard assessment.

Based on the above, the documentation of the OECD 202 (2013) study is not reliable.

Consequently, the information requirement is not fulfilled.

Therefore the information provided does not fulfil the information requirement.

4. Growth inhibition study aquatic plants

You have adapted this information requirement by using

- I. a Grouping of substances and read-across approach under Annex XI, Section 1.5. based on OECD TG 201 study (2013) with an analogue substance (weight of evidence), and
- II. by using data derived from Qualitative or quantitative structure-activity relationship (QSAR) in accordance with Annex XI, Section 1.3 with the Substance (weight of evidence, ECOSAR v1.00, 2014)
- III. WoE adaptation:
 - o experimental studies according to guideline 201 (2013) on an analogue substance;
 - o read-across adaptation based on analogue substance 2-Propyn-1-ol with methyloxirane, EC No. 609-530-2, "Rationale & justification for the analogue read-across approach used in the registration dossier of 2-Propyn-1-ol, compd. With ethylene oxide";
 - o a QSAR prediction based on ECOSAR v.1.00.

As explained in the Appendix on "Reasons common to several requests", sections (i), (ii) and (iii), your adaptation is rejected.

In addition we have identified the following deficiency with the study (2013):

Under Articles 3(28) and 10(a)(vii) and Annex I, Section 3.1.5. of REACH, a robust study summary must be provided for the study/ies giving rise to the highest concern. A robust study summary must cover critical information and allow an assessment of the validity and reliability of the study. For a study conducted according to OECD 201, it includes:

- A description of the test organism including initial biomass;
- a description of the preparation of test solutions, including the justification on the deviation from the TG (i.e. use of a solvent (0.1 mg/l dimethylformamide) for water soluble substance (reported WS of the Substance is 225 mg/L));
- a description of the preparation of test solutions, including the use of a solvent and/or an emulsifier (if any was used);
- a description of test conditions including hardness, dissolved oxygen
- a full description of the analytical monitoring method (e.g. calibration, recovery and sensitivity determination) and of the preparation of the test samples for analysis (including the description of filtration and/or extraction steps, if any);
- reporting of adequate raw data to allow a verification that the validity criteria of the method were fulfilled.

You provided the information on test material, name of the test organism, the test guideline followed, NOEC value at 72 h and conclusion. You also indicated that analytical monitoring was performed and that validity criteria were fulfilled.

However, in the study summary (2013), you did not provide the above listed critical elements.

Therefore, the data provided does not allow an independent assessment of the validity and reliability of this study and its results for use in hazard assessment.

Based on the above, the documentation of the OECD 201 (2013) study is not reliable. Consequently, the information requirement is not fulfilled.

Therefore the information provided does not fulfil the information requirement.

5. Ready biodegradability

Ready biodegradability is a standard information requirement in Annex VII to the REACH Regulation.

You have provided an OECD TG 301B study (2014) as a key study.

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

Under Articles 3(28) and 10(a)(vii) and Annex I, Section 3.1.5. of REACH, a robust study summary must be provided for the study/ies giving rise to the highest concern. A robust study summary must cover critical information and allow an assessment of the validity and reliability of the study. For a study conducted according to OECD 301B, it includes (among others):

- a clear description of the test material, including correct and up-to-date EC and CAS numbers, initial test substance concentrations;
- a description of inoculum, including concentration, pre-conditioning treatment;
- a description of test design, including test medium used, number of samples, temperature, test method including analytical method used.;
- a full description of the results including: data in tabular form, the graph of percentage degradation against time for the test and reference substances, the lag phase, degradation phase, the 10d-window and slope, treatment of the results.

You provided the information on test material (only EC and CAS numbers) , the test guideline followed, some information on the inoculum, test duration, results and conclusion of the study. You also indicated that validity criteria were fulfilled.

However, in the study summary of your key study (2014), you did not provide the above listed critical elements.

In your comments on the initial draft decision, you indicate to update the technical dossier including a statement that the name in the study report "2-Propyn-1-ol, polymer with ethylene oxide (>1 <2.5 mol EO)" represents the registered UVCB substance "2-Propyn-1-ol, reaction product with 1-2.5 moles of oxirane".

Therefore, the data provided in your dossier assessed for the initial draft decision and your comments to the initial draft decision do not allow an independent assessment of the validity and reliability of this study and its results for use in hazard assessment. This decision does not take into account updates of the registration dossiers after the date on which you were notified of the draft decision according to Article 50(1) of REACH (see section 5.4. of ECHA's Practical Guide "How to act in Dossier Evaluation").

Therefore the information provided does not fulfil the information requirement.

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 provided a key study in your dossier:

- i. *in vitro* chromosome aberration study, OECD 473, with an analogue substance 2-Propyn-1-ol, compound with methyloxirane, made in 2012, according to GLP, reliability 1, with a positive test results (positive controls and vehicle controls were included).

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

ECHA has considered the scientific and regulatory validity of your read-across approach(es) above in the Appendix "Reasons common to several requests", and found that your read-across adaptation is not acceptable.

In your comments on the draft decision, you refer to studies made with the source substance and to "missing" read-across information/justification. Concerning the justification document, we have addressed your comment above in the Appendix "Reasons common to several requests" (Section i.). We consider that your read-across adaptation remains unacceptable as explained above.

Therefore, the information requirement is not fulfilled.

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.

i. Triggering of the study

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

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 the Appendix "Reasons common to several requests".

The result of the requests for information in sections A.2 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.

ii. Assessment of information provided

You have provided a key study in your dossier:

- i. *in vitro* gene mutation study, OECD 476, with an analogue substance 2-Propyn-1-ol, compound with methyloxirane, made in 2012.

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

ECHA has considered the scientific and regulatory validity of your read-across approach(es) above in the Appendix "Reasons common to several requests", and found that your read-across adaptation is not acceptable.

In your comments on the draft decision, you refer to studies made with the source substance and to "missing" read-across information/justification. Concerning the justification document, we have addressed your comment above in the Appendix "Reasons common to several requests" (Section i.). We consider that your read-across remains unacceptable as explained above.

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. Screening study for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.)

A Screening for reproductive/developmental toxicity study (test method: EU B.64/OECD TG 422) is a standard information requirement under Annex VIII to REACH, if there is no evidence from analogue substances, QSAR or *in vitro* methods that the Substance may be a developmental toxicant. There is no information available in your dossier indicating that your Substance may be a developmental toxicant.

You have provided the following study

- i) a screening study 422 with an analogue 2-Propyn-1-ol, compound with methyloxirane, made in 2013, according to GLP, reliability 1, in rats, by gavage. The doses were 5, 25, 125 mg/kg of body weight. For females and males the NOAEL for fertility and development is established at the highest dose of 125 mg/kg bw.

We have assessed this information and identified the following issue:

You seek to adapt the following standard information requirements by applying (a) read-across approach(es) in accordance with Annex XI, Section 1.5. The submitted study as well as the studies referred to in your adaptation were performed with an analogue substance, and the read-across you proposed is rejected as explained in the Appendix "Reasons common to several requests".

To be considered compliant and to generate information concerning the effects of the Substance on male and female reproductive performance as well as specific target organ toxicity, the study has to meet the requirements of EU B.63/OECD TG 421 or EU B.64/OECD TG 422. The criteria of this test guideline include for example that the highest dose level should aim to induce toxic effects. However, the highest dose level in the study did not induce any toxicity and you have not shown that the aim was to induce toxicity. Therefore, the dose

level selection was too low, and the study does not fulfil the criterion set in EU B.63/OECD TG 421 or EU B.64/OECD TG 422.

In addition you have provided the following waiver: *"Based on the effects observed within the OECD 408 study (████ 2018) conducted with the target substance CAS 25749-64-8 on reproduction organs and reproduction parameters, further clarification is suggested. As the effects found may influence the reproduction an OECD 414 is proposed to further clarify the effects as a first step in a tiered approach. Further testing will be followed and proposed when the result of the OECD 414 is available. This tiered approach is justified by animal welfare as the result of the OECD 414 can also lead to a classification on reproduction which may alter the following testing. In result, currently no proposal for OECD 443 is entered. But this waiver will possibly be changed to a proposal with the update after the OECD 414 result is available."*

In regard of this waiver, we understand that you are referring to a possible adaptation under Annex VIII, Section 8.7., Column 2. We note that a parallel process for the examination of your testing proposal for the endpoint, pre-natal developmental toxicity study (Annex IX, Section 8.7.2.) in a first species (EU B.31./OECD TG 414) is ongoing. However, the OECD 414 study is not available and your adaptation is therefore rejected.

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

In your comments on the draft decision, you refer to studies made with the source substance and to "missing" read-across information/justification. Concerning the justification document, we have addressed your comment above in the Appendix "Reasons common to several requests" (Section i.). We consider that your read-across adaptation remains unacceptable as explained above.

Information on study design

A study according to the test method OECD TG 421/422 must be performed in rats with oral⁷ administration of the Substance.

4. Short-term toxicity testing on fish

Short-term toxicity testing on fish is a standard information requirement in Annex VIII to REACH.

You have provided a study record for following experimental study with the Substance

- Key study: performed according to DIN 38412, part 15, non-GLP (1979).

We have assessed this information and identified the following deficiency:

Although you do not explicitly claim an adaptation, ECHA understands that the information provided was submitted in order to meet the required information by way of adaptation under Annex XI, Section 1.1.2. This adaptation rule enables registrants to claim that the data from experiments not carried out according to GLP or the test methods referred to in Article 13(3) can be considered equivalent to data generated by those test methods where a number of cumulative conditions are met, in particular:

1. Adequate and reliable coverage of the key parameters foreseen to be investigated in the corresponding test methods referred to in Article 13(3), in this case OECD TG 203 & Key parameters such as experimental design including test concentrations and analytical monitoring of exposure concentrations;

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

2. Adequate and reliable documentation of the study is provided, including a robust study summary for a key study;
3. Adequacy for the purpose of classification and labelling and/or risk assessment.

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

1. The above key parameters of an OECD TG 203 are not met by the provided study, because of following reasons;
 - you have not specified whether the analytical monitoring of exposure concentrations has been performed;
 - you have not provided information on test concentrations nor measured concentrations;
 - Thus, you have not demonstrated that the test concentrations are maintained within 20% of the measured initial concentrations throughout testing;
 - However, the effect concentrations are reported in nominal values.
2. You have not provided adequate and reliable documentation in a form of a robust study summary, as required by Article 10(a)(vii) and Article 3(28) and Annex I, section 3.1.5. Specifically, the following elements are missing (among others and in addition to the data identified above):
 - a description of test fish, including the total length of the fish, loading and number of fish used;
 - a description of test conditions including, hardness, temperature, pH
 - a description of the preparation of test solutions, including use of vehicle if used,
 - a full description of the analytical monitoring method (e.g. calibration, recovery and sensitivity determination) and of the preparation of the test samples for analysis (including the description of filtration and/or extraction steps, if any);
 - adequate raw data on the % dissolved oxygen concentration relative to the air saturation value, and mortality in controls, to allow a verification that the validity criteria of the method were fulfilled.

Therefore, it is not possible to conduct an independent assessment of the reliability and validity of the study.

3. Based on the above, the provided information cannot be considered to be adequate for classification and labelling and/or risk assessment.

Therefore, your adaptation is rejected and the information requirement is not fulfilled.

Appendix C: 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 summaries⁸.

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 identify all the constituents as far as possible as well as their concentration (OECD GLP (ENV/MC/CHEM(98)16) and EU Tests Methods Regulation (EU) 440/2008 (Note, Annex). Also any constituents that have harmonised classification and labelling according to the CLP Regulation must be identified and quantified using the appropriate analytical methods,

With that detailed information, ECHA can confirm 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 dossiers⁹.

⁸ <https://echa.europa.eu/practical-guides>

⁹ <https://echa.europa.eu/manuals>

Appendix D: Procedure

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

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

The compliance check was initiated on 10 November 2020.

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

ECHA took into account your comments and amended the request(s).

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

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

Appendix E: List of references - ECHA Guidance¹⁰ 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)¹¹

RAAF - considerations on multiconstituent substances and UVCBs (RAAF UVCB, March 2017)¹²

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 documents¹³

¹⁰ <https://echa.europa.eu/guidance-documents/guidance-on-information-requirements-and-chemical-safety-assessment>

¹¹ <https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across>

¹² https://echa.europa.eu/documents/10162/13630/raaf_uvcb_report_en.pdf/3f79684d-07a5-e439-16c3-d2c8da96a316

¹³ <http://www.oecd.org/chemicalsafety/testing/series-testing-assessment-publications-number.htm>

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

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

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

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

Appendix F: 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
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

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