~~Confidential~~

Helsinki, 07 November 2023

Addressee(s)
Registrant(s) of JS_[redacted]_PSRC as listed in Appendix 3 of this decision

Date of submission of the dossier subject to this decision
26 March 2021

Registered substance subject to this decision ("the Substance")
Substance name: Reaction products of triphenyl phosphite and isodecanol (1:1)
EC/List number: 701-341-4

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

DECISION ON A COMPLIANCE CHECK

Under Article 41 of Regulation (EC) No 1907/2006 (REACH), you must submit the information listed below by ***12 August 2026***.

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

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

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

2. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.; test method: EU C.3./OECD TG 201);

3. Ready biodegradability (Annex VII, Section 9.2.1.1.; test method: EU C.4. A/B/C/D/E/F/OECD TG 301A/B/C/D/E/F or EU C.29./OECD TG 310).

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

4. 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;

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

6. Hydrolysis as a function of pH (Annex VIII, Section 9.2.2.1.; test method: EU C.7./OECD TG 111);

7. Adsorption/desorption screening (Annex VIII, Section 9.3.1.; test method: EU C.18/OECD TG 106 or EU C.19/OECD TG 121).

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

8. 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);

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

10. Long-term toxicity testing on fish (Annex IX, Section 9.1.6.; test method: EU C.47./OECD TG 210).

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

Information required depends on your tonnage band

You must provide the information listed above for all REACH Annexes applicable to you in accordance with Articles 10(a) and 12(1) of REACH. The addressee(s) of the decision and their corresponding information requirements based on registered tonnage band are listed in Appendix 3.

In the requests above, the same study has been requested under different Annexes or for different information requirements. In the case of the same study requested under different Annexes, this is because some information requirements may be triggered at lower tonnage band(s). In such cases, only the reasons why the information requirement is triggered are provided for the lower tonnage band(s). For the highest tonnage band, the reasons why the standard information requirement is not met and the specification of the study design are provided.
In all cases, only one study is to be conducted; all registrants concerned must make every effort to reach an agreement as to who is to carry out the study on behalf of the others under Article 53 of REACH.

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 requirements for testing and reporting new tests under REACH, see Appendix 4.

Appeal

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

Failure to comply

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

Authorised[1] 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 1: Reasons for the request(s)

Contents

0. Reasons common to several requests

0.1. Read-across adaptation rejected

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

- Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.);
- Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.);
- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.);
- Ready biodegradability (Annex VII, Section 9.2.1.1.);
- Hydrolysis as a function of pH (Annex VIII, Section 9.2.2.1);
- Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.);
- Long-term toxicity testing on fish (Annex IX, Section 9.1.6.).

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

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

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

5 In your technical dossier you have not provided a read-across justification document. However, you have referred to the information on analogue substances in IUCLID Sections 5 (summary for Environmental fate and pathways) and 7.8 and your Chemical Safety Report section 5.11.

0.1.1. Scope of the grouping of substances – identification of source substances

0.1.1.1. Reproductive toxicity

0.1.1.1.1. Information provided in your technical dossier

6 For reproductive toxicity, including developmental toxicity, you have provided information on

- Triphenyl phosphite (TPP), EC 202-908-4 (source substance 1);
- Phenol, EC 203-632-7 (source substance 2); and
- Triphenyl phosphate, EC 204-112-2 (source substance 3)

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

8 For [redacted], you specify that it is a constituent and a close analogue of the Substance. For source substances 2 and 3: "*These substances are structurally relevant biotransformation products of the registered substance and as such are considered to represent the inherent properties of the registered substance*."

9 For reproductive toxicity you have derived the NOAEL for the Substance based on the information on the source substance 1. On this basis, ECHA understands that this read-across hypothesis assumes that different compounds have the same type of effects supported by the information on the structurally relevant biotransformation products (source substances 2 and 3). You predict the properties of your Substance to be quantitatively equal to those of the source substance 1.

0.1.1.1.2. I*nformation provided in your comments*

10 In your comments to the draft decision you provide a justification document, attached to them, based on a different hypothesis.

11 You claim that source substance 1 (TPP) is considered as a "*primary analogue that was used for read-across […] because this was felt to be the most conservative approach given TPP's toxicity relative to the other phosphite constituents/analogue substances*". You further state that "*The current understanding regarding TPP's toxicity relative to phenyl/alkyl phosphites and alkyl phosphites is based on a variety of acute toxicity, skin sensitisation, and repeat-dose toxicity studies*".

12 You concluded that "*Based on this evaluation, the registrants of the reaction products believe it is reasonable to read-across to TPP for toxicology endpoints as a conservative estimate of the toxicity of the overall substance*".

13 To support this statement you use data from the following substance constituents: [redacted].

14 Based on the above, ECHA understands that your read-across hypothesis assumes that different compounds have the same type of effects. You predict the properties of your Substance from source substance 1 (TPP) based on a worst-case approach.

0.1.1.2. Environmental fate and hydrolysis

15 For ready biodegradability and hydrolysis as a function of pH you have provided information on triphenyl phosphite (TPP), EC 202-908-4 (source substance 1).

16 You provide the following reasoning for the prediction of biodegradability and hydrolysis:

17 In the CSA you state: "*...[redacted], a major constituent, is readily biodegradable.*"

18 On the basis of this information, ECHA understands that your read-across hypothesis assumes that different compounds have the same type of effects. You predict the properties of your Substance to be quantitatively equal to those of the source substance 1.

0.1.1.3. Aquatic toxicity

19 For aquatic toxicity studies you refer to the information on claimed hydrolysis products of the Substance:

- phenol, EC 203-632-7 (source substance 2); and
- isodecanol, EC 271-234-0 (source substance 4).

20 You provide the following reasoning for the prediction of aquatic toxicity, provided in the summary of Ecotoxicological information:

21 "*It is not possible to test [redacted] due to its rapid hydrolysis. The environmental risk assessment was based on phenol and isodecanol, it's primary hydrolysis products.*"

22 While you have not identified this information as a read-across approach, the information provided in IUCLID Section 6, Ecotoxicological information, is for substances that are not

the Substance. Therefore, ECHA understands that the information provided for source substance 2 and source substance 4 was submitted as a read-across adaptation under Annex XI, Section 1.5 of REACH.

23 ECHA further understands that your read-across hypothesis is based on the formation of common (bio)transformation products. You predict the properties of your Substance to be quantitatively equal to those of the source substances 2 and 4.

0.1.2. Prediction of toxicological properties

24 We have identified the following issue(s) with the prediction(s) of toxicological properties:

0.1.2.1. Prediction of reproductive toxicity properties, based on the information in your technical dossier: missing supporting information to compare the properties of the substances

25 Annex XI, Section 1.5. requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must provide supporting information to scientifically justify the read-across explanation for prediction of properties. The set of supporting information should strengthen the rationale for the read-across in allowing to verify the crucial aspects of the read-across hypothesis and establishing that the properties of the Substance can be predicted from the data on the source substance(s) (Guidance on IRs and CSA R.6, Section R.6.2.2.1.f.).

26 Supporting information must include supporting information/bridging studies to compare properties of the source substance(s) with the Substance to confirm your predictions.As indicated above, your read-across hypothesis assumes that the source substance 1 (TPP), a constituent of the Substance, and the Substance causes the same type of effect(s) for the properties under consideration. In this context, in addition to the source substance 1, exposure to the Substance may also lead to exposure to other constituents. The impact of exposure to these other constituents on the prediction of properties of the Substance needs to be assessed to ensure that a reliable prediction can be made.

27 Therefore, relevant, reliable and adequate information allowing to compare the properties of the Substance and the source substance is necessary to confirm a conservative prediction of the properties of the Substance from the data on the source substance 1.

28 You have provided information on the constituent [redacted] present in the Substance at the concentration of >=14-<=25 % (w/w) (boundary composition) to predict the reproductive toxicity properties of the Substance. To support the predictions, you have provided information on the source substances 2 and 3. We have evaluated the information and identified the following issues:

29 To predict the properties of the Substance, you have provided information on the constituent ([redacted]) covering [redacted] % of the Substance. However, you have not provided in your dossier information characterising the exposure to the remaining [redacted] % of the Substance composition (non-common constituents) resulting from exposure to the Substance. No experimental data or other adequate and reliable information addressing the impact of exposure to the non-common constituents on the properties of the Substance is included in the documentation of your read-across approach.

30 In addition, to support your prediction, you have provided information on the source substances 2 and 3. You indicate that these substances are structurally related biotransformation products of the Substance and as such are considered to represent the inherent properties of the Substance.

31 However, you have not explained how this information

- is relevant in the context of confirming the hypothesis that the Substance and the source substance 1 cause the same type of effect(s); and
- supports that exposure to the other constituents of the Substance would not lead to greater toxicity than exposure to [redacted] alone.

32 In the absence of such information, you have not established that the property under consideration of the Substance can be predicted from the source substance 1. Therefore you have not provided sufficient supporting information to scientifically justify the read across.

0.1.2.2. Prediction of reproductive toxicity properties, based on the information in your comments: missing supporting information to compare the properties of the substances

33 From the justification document, provided with the comments to the draft decision, as indicated above, you provide a new hypothesis, that constitutes a worst-case for the prediction of the property under consideration of the Substance. In this context, relevant, reliable and adequate information allowing to compare the properties of the Substance and the source substance 1 is necessary to confirm a conservative prediction of the properties of the Substance from the data on the source substance 1. Such information can be obtained, for example, from bridging studies of comparable design and duration for the source substance(s).

34 In your justification document attached to your comments to the draft decision you provide a summary (in the form of tabulated data) of "*the available toxicological data*" for the other constituents ([redacted]). You use the information on acute toxicity, skin sensitisation and repeated dose toxicity to support your worst-case hypothesis. You conclude that the source substance 1 (TPP) can be considered "*as a conservative estimate of the toxicity of the overall substance",* based on "*the lowest oral LD50*", lowest EC3 value (LLNA) and "*significantly lower effect levels than the other members of this class of chemistry"* for repeated dose toxicity.

35 In addition, you agree to perform the screening for reproductive/developmental toxicity study (OECD TG 422) with the Substance. You state your intention to use the data to "*compare the expected toxicity range of the reactions products substance (*i.e. the Substance) *to TPP and the other phosphite constituents"*.

36 First, ECHA notes that none of the supporting studies with the proposed substances are reported in the technical dossier or in your comments. Therefore, ECHA cannot evaluate the adequacy and reliability of those studies.

37 Second, we point out that whilst the information on acute toxicity, skin sensitisation and repeated dose toxicity may suggest that [redacted] is more toxic than the other constituents for these specific properties, this information does not inform on the developmental and reproductive toxicity properties. Therefore, it is not considered as relevant to support prediction for reproductive and developmental toxicity.

38 Third, to support your prediction for reproductive/developmental toxicity, you intend to rely on data still to be generated (OECD TG 422). Since your intentions to improve the toxicological profile of the Substance and your plans to refine your read-across approach rely on data which is yet to be generated, no conclusion on the compliance can currently be made.

39 Finally, in the comments to the draft decision you also state "*We believe that this presentation in the context of the existing group assessment that ECHA is conducting on TPP and phenyl phosphites provides a very solid basis to justify the read-across approach that has been used for the reaction products dossie".* We assume that you may be referring

to the "Assessment of regulatory needs" (ARN) for *Triphenylphosphites* (Triphenylphosphite and its derivatives) As also highlighted in the foreword of this ARN report, ECHA's activity referred to as 'Working with Groups' is intended to speed up the identification of chemicals that need regulatory action, and authorities may decide to address groups of structurally related substances rather than single substances. The work is different from grouping and read-across as defined in Section 1.5 of Annex XI to REACH as a general rule for adaptation of standard information required for compliance with REACH. For more information on the 'Working with Groups' please visit: https://echa.europa.eu/working-with-groups.

40 Based on the above, you have not established that the property under consideration of the Substance can be predicted from the source substance 1. Therefore, the information provided in your comments does not change the assessment outcome and your adaptation according Section 1.5. of Annex XI of REACH is rejected.

0.1.3. Prediction of ecotoxicological properties

0.1.3.1. Prediction of environmental fate and hydrolysis: missing supporting information to compare the properties of the Substance and the source substance 1

41 As indicated above under Section 0.1.2.1., Annex XI, Section 1.5 requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must provide supporting information to scientifically justify the read-across explanation for prediction of properties. The set of supporting information should strengthen the rationale for the read-across in allowing to verify the crucial aspects of the read-across hypothesis and establishing that the properties of the Substance can be predicted from the data on the source substance (Guidance on IRs and CSA R.6, Section R.6.2.2.1.f.).

42 Supporting information must include supporting information/bridging studies to compare properties of the source substance(s) with the Substance to confirm your prediction.

43 As indicated above, your read-across hypothesis is based on the assumption that the structurally similar source substance 1, a constituent of the Substance, has the same type of environmental fate and hydrolysis properties as the Substance. In this context, in addition to the source substance 1, the environmental fate and hydrolysis properties of the Substance may be impacted by the other constituents. Thus, the impact of exposure to these other constituents on the prediction of environmental fate and hydrolysis properties of the Substance need to be assessed to ensure that a reliable prediction can be made.

44 Therefore, relevant, reliable and adequate information allowing to compare the properties of the Substance and the source substance is necessary to confirm that a conservative prediction of the properties of the Substance from the data on the source substance 1.

45 In order to support your claim that the Substance and source substance 1 have similar properties for the information requirements under consideration, you refer to the similarities in terms of physicochemical properties and rapid hydrolysis. You have provided a ready biodegradability study and a hydrolysis study with the source substance 1 and no information for the Substance itself or for the other constituents of the Substance.

46 In the absence of adequate information allowing to compare the ready biodegradability and hydrolysis properties of the Substance and the source substance 1, it cannot be confirmed that both substances would have the same type of environmental fate and hydrolysis properties.

47 In addition, you have not explained how the other constituents of the Substance impact environmental fate and hydrolysis properties of the Substance or how [redacted] alone would represent the most conservative prediction.

48 In the absence of such information, you have not established that the properties under consideration of the Substance can be predicted from the source substance 1. Therefore, you have not provided sufficient supporting information to scientifically justify the read-across.

0.1.3.2. Prediction of aquatic toxicity: Missing supporting information on formation of the claimed hydrolysis products and the impact of the constituents of the substance and their respective hydrolysis products)

49 As indicated above in Sections 0.1.2.1. and 0.1.3.1., Annex XI, Section 1.5. requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must provide supporting information to scientifically justify the read-across explanation for prediction of properties. The set of supporting information should strengthen the rationale for the read-across in allowing to verify the crucial aspects of the read-across hypothesis and establishing that the properties of the Substance can be predicted from the data on the source substance(s) (Guidance on IRs and CSA R.6, Section R.6.2.2.1.f.).

As indicated above, your read-across hypothesis is based on the (bio)transformation of the Substance.

50 into the the source substance(s) 2 and 4. In this context, information characterising the rate and extent of the (bio)transformation of the constituents of the Substance into the source susbtances 2 and 4 is necessary to confirm the formation of the proposed (bio)transformation products and to assess the impact of the exposure to the constituents of the susbstance on the properties of the Substance.

51 As explained under Section 0.1.3.1, you have provided a hydrolysis study only for one constituent (source substance 1) of your multi-constituent substance. You have not provided information confirming that the hydrolysis products of all the constituents of your Substance are the source substances 2 and 4.

52 Furthermore, you have not provided information characterising the exposure to the constituents resulting from exposure to the Substance before the assumed hydrolysis takes place. In addition, no experimental data or other adequate and reliable information addressing the impact of exposure to the constituents of the substance and their respective hydrolysis products is included in the documentation of your read-across approach.

53 In the absence of this information, you have not provided supporting evidence establishing that the proposed (bio)transformation products are formed from all the constituents of the Substance as assumed in your read-across hypothesis.

54 In your comments to the draft decision, you acknowledge that there is no quantified hydrolysis test data for the Substance and you agree to perform the requested hydrolysis study (Request 6). You further state that you have provided hydrolysis data for [redacted] and [redacted], which are constituents of the Substance. You consider that this is a sufficient basis to characterise the hydrolysis of these substances and to apply aquatic toxicity classification of phenol to the Substance.

55 However, you have not updated the dossier with a hydrolysis study on [redacted] and you have equally not provided any hydrolysis study data for [redacted] in your comments to the draft decision. With the comments you generally did not provide any data or evidence addressing the issues identified above (e.g. you have not provided information confirming that the hydrolysis products of all the constituents of your Substance are the source substances 2 and 4.) Therefore, the information provided in your comments does not change the assessment outcome.

56 Therefore, you have not established that a reliable prediction of the property under consideration of the Substance can be derived on the basis of your read-across hypothesis.

0.1.3.3. Prediction of aquatic toxicity: Missing robust study summaries

57 Annex XI, Section 1.5. requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must include robust study summary for each source study used in the adaptation.

58 Robust study summary must provide a detailed summary of the objectives, methods, results and conclusions of a full study report providing sufficient information to make an independent assessment of the study (Article 3(28)).

59 In your justification for your adaptation, and in the additional information you refer to under IUCLID Section 6 "Ecotoxicological information", you have not provided any robust study summaries of for studies conducted with source substances 2 and 4, which you intend to rely on for your read across adaptation.

60 You have not provided detailed information on the methods, results and conclusions, allowing for an independent assessment of the source studies. Therefore, you have failed to provide a robust study summary for each source study that ECHA understands you intend to use in the adaptation as required by Annex XI, Section 1.5.

0.1.4. Conclusion on the read-across approach

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

0.2. For aquatic toxicity: Annex XI, Section 2 – Technically not feasible rejected

62 You have adapted the following information requirements by using Annex XI, Section 2. (testing not technically possible):

- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.);
- Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.);
- Long-term toxicity testing on fish (Annex IX, Section 9.1.6.).

63 You have not identified the provided information for long-term studies as adaptation according to Annex XI, Section 2, however based on the information you provided, ECHA understands that you intended to rely on an adaptation under Annex IX, Section 2. To support the adaptation, you have provided the following information: *"Substance is highly insoluble in water and what does dissolve is subject to rapid hydrolysis. See discussion in aquatic toxicity summary on alternative assessment approach."*

64 Under Annex XI, Section 2, a study may be omitted if it is technically not feasible to conduct because of the properties of the substance.

65 You claim that the studies are difficult to conduct, however you do not provide evidence to demonstrate that they are technically not feasible which is a different legal criteria.

66 Therefore, your adaptation is rejected.

Reasons related to the information under Annex VII of REACH

1. Long-term toxicity testing on aquatic invertebrates

67 Short-term toxicity testing on aquatic invertebrates is an information requirement under Annex VII, Column 1, Section 9.1.1. However, under Column 2, long-term toxicity testing on aquatic invertebrates may be required by the Agency if the substance is poorly water soluble, i.e. solubility below 1 mg/L.

1.1. Triggering of the information requirement

68 Poorly water soluble substances require longer time to reach steady-state conditions. As a result, the short-term tests do not give a true measure of toxicity for this type of substances and the long-term test is required.

69 You have provided information which indicates that the Substance includes constituents that are poorly water soluble. The predicted water solubility of constituent [redacted] is 0.233 µg/L.

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

1.2. Information requirement not fulfilled

The information provided, its assessment and the specifications of the study design are addressed under request 9.

2. Growth inhibition study aquatic plants

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

72 You have provided the following data waiver: " *Substance is highly insoluble in water and what does dissolve is subject to rapid hydrolysis. See discussion in aquatic toxicity summary on alternative assessment approach."*

2.1. Assessment of the information provided

2.1.1. Read-across adaptation rejected

73 As explained in Section 0.1.1.3., while you have not identified this information as a read-across approach, the information provided in IUCLID Section 6, Ecotoxicological information, is for substances that are not the Substance. ECHA understands that the information provided for source substance 2 and source substance 4 was submitted as a read-across adaptation under Annex XI, Section 1.5 of REACH.

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

2.1.2. Annex XI, Section 2 – Technically not feasible rejected

75 As explained in Section 0.2., your adaptation based on the impossibility to test due to substance properties under Annex XI, Section 2. is rejected.

76 Therefore, the information requirement is not fulfilled.

2.2. Study design and test specifications

77 The Substance is difficult to test due to the low water solubility (<1 mg/L) and potentially rapid hydrolysis. 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.

78 If the Substance hydrolyses rapidly in the test system, aquatic toxicity of hydrolysis degradation products may be determined by allowing the parent compound to degrade and then exposing the test organisms to the resulting test solution. The decision to test the parent test chemical and/or its degradation products must be based on a consideration of its half-life.

79 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 or its hydrolysis products (depending on the rate of hydrolysis and/or the relative (eco)toxicities of the parent test chemical and degradation products) throughout the exposure duration and report the results. If it is not possible to demonstrate the stability of exposure concentrations (i.e. measured concentration(s) not within 80-120% of the nominal concentration(s)), you must express the effect concentration based on measured values as described in the OECD TG 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, or the hydrolysis product(s) in the test solution.

80 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).

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

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

3. Ready biodegradability

82 Ready biodegradability is an information requirement in Annex VII to REACH (Section 9.2.1.1.).

3.1. Information provided

83 You have provided:

- A ready biodegradability study (2015) with Source substance 1;
- A ready biodegradability study (2003) with Source substance 1, which you state as disregarded due major methodological deficiencies.

3.2. Assessment of information provided

84 As explained in Section 0.1., your adaptation based on grouping of substances and read-across approach under Annex XI, Section 1.5. is rejected and the information requirement is not fulfilled.

3.3. Study design and test specification

85 The revised introduction to the OECD Guidelines For Testing Of Chemicals, Section 3 Part I states that ready biodegradability tests are intended for pure substances but may also be relevant, on a case-by-case basis, to mixtures of structurally similar chemicals (i.e. which are composed of constituents expected to show similar degradation kinetics). However, such tests are not generally applicable for complex mixtures or substances (i.e. UVCB or multi-constituent substances) containing different types of constituents. For complex substances, a single ready biodegradability test does not allow to conclude on the ready biodegradability of all constituents and therefore, does not fulfil the information requirement. Based on the information provided under IUCLID, section 1.2, your Substance contains 9 constituents of varying chemical structure including differing functional groups.

86 The Substance is a complex substance and contains constituents with significant structural differences described above.

87 For the reasons provided above, testing on the Substance as a whole does not fulfil the information requirement. For the generation of information on ready biodegradability, you must consider the level of information required for the purposes of classification and labelling and, if applicable to your registration, the PBT/vPvB assessment and the exposure assessment/risk characterisation. In order to conclude on which of constituents of the Substance are and which are not readily biodegradable, you may have to consider conducting more than one study using selected individual constituents and/or fractions. If you choose to test one (or more) fraction(s) of the Substance, you must provide a justification that their constituents within chosen fraction(s) are similar enough so that similar degradation kinetics can be assumed. If you decide to conduct a single study in order to prove that all constituents of the Substance are readily biodegradable, you must provide a justification that the selected constituent/fraction can be considered a reasonable worst-case for the Substance as a whole in terms of degradation kinetics.

88 Justification for selection of relevant constituent and/or fractions for the testing, must consider degradation kinetics of constituents of the Substance based, as minimum, on the similarity/differences of the chemical structures and the physico-chemical properties of constituents of the Substance. For that purpose, tools and approaches mentioned in Guidance on IRs and CSA, Sections R.7b and R.11 should be considered.

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

Reasons related to the information under Annex VIII of REACH

4. Screening for reproductive/developmental toxicity

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

4.1. Information provided

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

(i) an extended combined repeated dose toxicity study with the reproduction / developmental toxicity screening test (2004) with the source substance 1 (key study);

(ii) a two-generation reproduction toxicity study (2001) with the source substance 2 (supporting study);

(iii) a one-generation reproductive toxicity (1987) with the source substance 3 (supporting study).

4.2. Assessment of the information provided

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

93 Therefore, the information requirement is not fulfilled.

4.3. Specification of the study design

94 A study according to the test method EU B.63/OECD TG 421 or EU B.64/OECD TG 422 must be performed in rats.

95 As the Substance is a liquid, the study must be conducted with oral administration of the Substance (Annex VIII, Section 8.7.1, Column 1).

96 Therefore, the study must be conducted in rats with oral administration of the Substance.

97 In your comments to the draft decision you agreed to perfom the requested study.

5. Long-term toxicity testing on fish

98 Short-term toxicity testing on fish is an information requirement under Annex VIII, Column 1, Section 9.1.3.. However, long-term toxicity testing on fish may be required by the Agency (Section 9.1.3., Column 2) if the substance is poorly water soluble, i.e. solubility below 1 mg/L.

5.1. Triggering of the information requirement

99 Poorly water soluble substances require longer time to reach steady-state conditions. As a result, the short-term tests do not give a true measure of toxicity for this type of substances and the long-term test is required.

100 As already explained in request 2, the Substance is poorly water soluble and information on long-term toxicity on fish must be provided.

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

5.2. Information requirement not fulfilled

102 The information provided, its assessment and the specifications of the study design are addressed under request 10.

6. Hydrolysis as a function of pH

103 Hydrolysis as a function of pH is an information requirement under Annex VIII to REACH (Section 9.2.2.1.).

6.1. Information provided

104 You have adapted this information requirement by using Annex XI, Section 1.5. (grouping of substances and read-across approach) based on hydrolysis studies (2017 and 2002) with source substance 1.

6.2. Assessment of the information provided

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

106 Therefore, the information requirement is not fulfilled.

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

7. Adsorption/ desorption screening

108 Adsorption/desorption screening is an information requirement under Annex VIII to REACH (Section 9.3.1).

7.1. Information provided

109 You have adapted this information requirement by using Column 2 of Annex VIII, Section 9.3.1. To support the adaptation, you have provided the following justification:

a. *"the study does not need to be conducted because the substance and its relevant degradation products decompose rapidly"*
b. *"Substance is subject to rapid hydrolysis in water (abiotic degradation) and therefore not anticipated to be in the environment for an extended period."*

7.2. Assessment of the information provided

110 This information requirement can be adapted if the substance and its relevant degradation products decompose rapidly (column 2 of Annex VIII, Section 9.3.1). Therefore, if a substance hydrolyses, it might be more appropriate to also determine the degree of adsorption of the hydrolysis products (Guidance on information requirements and chemical safety assessment, Section R.7.1.15.4).

111 You provided biodegradation studies on one constituent of the Substance. As explained under Request 3, the information requirement for ready biodegradability is not fulfilled. Therefore, you have not demonstrated that this information can be omitted using rapid (ultimate) decomposition of the Substance (and all of its constituents).

112 Furthermore, you state that this information is not required due to rapid hydrolysis in water (abiotic degradation). However, firstly the information requirement for hydrolysis as a function of pH is not fulfilled (as explained under Request 6). Secondly, you have not demonstrated rapid decomposition of the hydrolysis products of the Substance.

113 In your comments to the draft decision, you state: "*hydrolysis will also make this study impossible*" and then you refer to your comments for the long-term aquatic toxicity studies.

114 You have not provided any specific information addressing the issues identified above. You have not provided information demonstrating rapid decomposition of the Substance (and all of its constituents), information on hydrolysis or decomposition of the possible hydrolysis products. Therefore, the information provided in your comments does not change the assessment outcome.

115 Therefore, the information requirement is not fulfilled.

Reasons related to the information under Annex IX of REACH

8. Pre-natal developmental toxicity study in one species

116 A pre-natal developmental toxicity (PNDT) study (OECD TG 414) in one species is an information requirement under Annex IX, Section 8.7.2.

8.1. Information provided

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

(i) a pre-natal developmental toxicity study in rats (2021) with the source substance 1 (TPP);

(ii) an extended Combined repeated dose toxicity study with the reproduction / developmental toxicity screening test (2004) with the source substance 1;

(iii) a pre-natal developmental toxicity study in rats (reported 2006) with the source substance 2 (supporting study);

(iv) a pre-natal developmental toxicity study in mice (1983) with the source substance 2 (supporting study);

(v) a pre-natal developmental toxicity study in rats (1983) with the source substance 2 (supporting study);

(vi) a pre-natal developmental toxicity study in rats (1987) with the source substance 3 (supporting study).

118 In your comments to the draft decision you have further provided a justification document according to Annex XI, Section 1.5, (grouping and read-across) of the REACH Regulation. In this document you claim that *"There is a new OECD 414 study on TPP in rats which indicates that it is not a developmental toxicant.".*

8.2. Assessment of the information provided

119 As explained in Section 0.1., your adaptations in your dossier, and submitted in your comments, based on grouping of substances and read-across approach under Annex XI, Section 1.5. are rejected.

120 In addition, ECHA identified the following issue, specific for this information requirement.

8.2.1. Missing robust study summary for the PNDT study referred to in your comments

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

(1) be adequate for the purpose of classification and labelling and/or risk assessment;

(2) have adequate and reliable coverage of the key parameters addressed in the corresponding study that shall normally be performed for a particular information requirement.

122 Annex XI, Section 1.5. requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must include robust study summary for each source study used in the adaptation.

123 Robust study summary must provide a detailed summary of the objectives, methods, results and conclusions of a full study report providing sufficient information to make an independent assessment of the study (Article 3(28)). The robust study summaries also allow to establish whether the source studies have an adequate and reliable coverage of the key parameters expected to be investigated and whether the results are adequate for the purpose of classification and labelling and/or risk assessment.

124 For the new OECD TG 414 study with source substance 1 (TPP), which you refer to in the comments to the draft decision, you provide NOAEL and LOAEL values only for maternal toxicity (Table 5 in the justification document). You have not provided detailed information on the methods, results and conclusions, allowing for an independent assessment of the study. As you have failed to provide a robust study summary, as required by Annex XI, Section 1.5, it is not possible to establish whether this OECD TG 414 study has an adequate and reliable coverage of the key parameters expected to be investigated and whether the results are adequate for the purpose of classification and labelling and/or risk assessment.

125 Therefore, the information requirement is not fulfilled.

8.3. Specification of the study design

126 A PNDT study according to the test method OECD TG 414 should be performed in rats or rabbits as preferred species.

127 As the Substance is a liquid, the study must be conducted with oral administration of the Substance (Annex IX, Section 8.7.2., Column 1).

128 Therefore, the study must be conducted in rats or rabbits with oral administration of the Substance.

9. Long-term toxicity testing on aquatic invertebrates

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

9.1. Information provided

130 You have provided the following justification for data waiving: "*Substance is highly insoluble in water and what does dissolve is subject to rapid hydrolysis. See discussion in aquatic toxicity summary on alternative assessment approach.*" ;

9.2. Assessment of the information provided

9.2.1. Read-across adaptation rejected

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

9.2.2. Annex XI, Section 2 – Technically not feasible rejected

132 As explained in Section 0.2., your adaptation based on the impossibility to test due to substance properties under Annex XI, Section 2. is rejected.

133 Therefore, the information requirement is not fulfilled.

9.3. Study design and test specifications

134 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 and test specifications' under request 2.

10. Long-term toxicity testing on fish

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

10.1. Information provided

136 You have provided the following justification for data waiving: "*Substance is highly insoluble in water and what does dissolve is subject to rapid hydrolysis. See discussion in aquatic toxicity summary on alternative assessment approach.*"

10.2. Assessment of the information provided

10.2.1. Read-across adaptation rejected

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

10.2.2. Annex XI, Section 2 – Technically not feasible rejected

138 As explained in Section 0.2., your adaptation based on the impossibility to test due to substance properties under Annex XI, Section 2. is rejected.

139 Therefore, the information requirement is not fulfilled.

10.3. Study design and test specifications

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

141 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 and test specifications' under request 2.

References

The following documents may have been cited in the decision.

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

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

Guidance on data-sharing; ECHA (2017).
Guidance for monomers and polymers; ECHA (2012).
Guidance on intermediates; ECHA (2010).
All guidance documents are available online: https://echa.europa.eu/guidance-documents/guidance-on-reach

Read-across assessment framework (RAAF)

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

The RAAF and related documents are available online:
https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across

***OECD Guidance documents* (OECD GDs)**

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

Appendix 2: Procedure

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

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

The compliance check was initiated on 30 June 2022.

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

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

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

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

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

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

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

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

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

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

Appendix 4: Conducting and reporting new tests for REACH purposes

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

1.1. Test methods, GLP requirements and reporting

(1) Under Article 13(3) of REACH, all new data generated as a result of this decision must be conducted according to the test methods laid down in a European Commission Regulation or to international test methods recognised by the Commission or ECHA as being appropriate.

(2) Under Article 13(4) of REACH, ecotoxicological and toxicological tests and analyses must be carried out according to the GLP principles (Directive 2004/10/EC) or other international standards recognised by the Commission or ECHA.

(3) Under Article 10(a)(vi) and (vii) of REACH, all new data generated as a result of this decision must be reported as study summaries, or as robust study summaries, if required under Annex I of REACH. See ECHA Practical Guide on How to report robust study summaries[2].

(4) Under the introductory part of Annexes VII/VIII/IX/X to REACH, where a test method offers flexibility in the study design, for example in relation to the choice of dose levels or concentrations, the chosen study design must ensure that the data generated are adequate for hazard identification and risk assessment.

1.2. Test material

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

(1) Selection of the Test material(s)
The Test Material used to generate the new data must be selected taking into account the following:
- the variation in compositions reported by all members of the joint submission,
- the boundary composition(s) of the Substance,
- the impact of each constituent/ impurity on the test results for the endpoint to be assessed. For example, if a constituent/ impurity of the Substance is known to have an impact on (eco)toxicity, the selected Test Material must contain that constituent/ impurity.

(2) Information on the Test Material needed in the updated dossier
- You must report the composition of the Test Material selected for each study, under the "Test material information" section, for each respective endpoint study record in IUCLID.
- The reported composition must include all constituents of each Test Material and their concentration values and other parameters relevant for the property to be tested.

[2] https://echa.europa.eu/practical-guides

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

Technical instructions on how to report the above is available in the manual on How to prepare registration and PPORD dossiers[3].

2. General recommendations for conducting and reporting new tests

2.1. Environmental testing for substances containing multiple constituents

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

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

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

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

[3] https://echa.europa.eu/manuals