EUROPEAN CHEMICALS AGENCY

Helsinki, 12 October 2017

Addressee [redacted]

Decision number: CCH-D-2114375447-39-01/F
Substance name: bis(2-ethylhexyl) succinate
EC number: 220-836-1
CAS number: 2915-57-3
Registration number: [redacted]
Submission number: [redacted]
Submission date: 03/08/2015
Registered tonnage band: 100-1000

DECISION ON A COMPLIANCE CHECK

Based on Article 41 of Regulation (EC) No 1907/2006 (the REACH Regulation), ECHA requests you to submit information on:

1. ***In vitro* cytogenicity study in mammalian cells (Annex VIII, Section 8.4.2., test method: OECD TG 473) or in vitro micronucleus study (Annex VIII, Section 8.4.2, test method: OECD TG 487) with the registered substance;**

2. ***In vitro* gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.; test method: OECD TG 476 or TG 490) with the registered substance;**

3. **Sub-chronic toxicity study (90-day), oral route (Annex IX, Section 8.6.2.; test method: EU B.26./OECD TG 408) in rats with the registered substance;**

4. **Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.; test method: EU B.31./OECD TG 414) in a first species (rat or rabbit), oral route with the registered substance;**

5. **Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.; test method: Daphnia magna reproduction test, EU C.20./OECD TG 211) with the registered substance;**

6. **Long-term toxicity testing on fish (Annex IX, Section 9.1.6.1.; test method: Fish, early-life stage (FELS) toxicity test, OECD TG 210) with the registered substance;**

You may adapt the testing requested above according to the specific rules outlined in Annexes VI to X and/or according to the general rules contained in Annex XI to the REACH Regulation. To ensure compliance with the respective information requirement, any such adaptation will need to have a scientific justification, referring and conforming to the appropriate rules in the respective annex, and adequate and reliable documentation.

You have to submit the requested information in an updated registration dossier by **20 April 2020.** You also have to update the chemical safety report, where relevant. The timeline has been set to allow for sequential testing.

The reasons of this decision are set out in Appendix 1. The procedural history is described in Appendix 2 and advice and further observations are provided in Appendix 3.

Appeal

This decision can be appealed to the Board of Appeal of ECHA within three months of its notification. An appeal, together with the grounds thereof, has to be submitted to ECHA in writing. An appeal has suspensive effect and is subject to a fee. Further details are described under: http://echa.europa.eu/regulations/appeals.

Authorised[1] by Kevin Pollard, Head of Unit, Evaluation E1

[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

TOXICOLOGICAL AND ECOTOXICOLOGICAL INFORMATION

In accordance with Articles 10(a) and 12(1) of the REACH Regulation, a technical dossier registered at 100 to 1000 tonnes per year must contain, as a minimum, the information specified in Annexes VII to IX to the REACH Regulation. The information to be generated for the dossier must fulfil the criteria in Article 13(4) of the same regulation.

Your registration dossier contains for the standard information requirements for repeated dose toxicity, mutagenicity, reproductive toxicity, developmental toxicity and long-term toxicity to aquatic invertebrates adaptation arguments in form of a grouping and read-across approach according to Annex XI, Section 1.5. of the REACH Regulation. ECHA has assessed first the scientific and regulatory validity of your grouping and read-across approach in general before the individual endpoints (sections 1-6).

Grouping and read-across approach for toxicological and ecotoxicological information

You have sought to adapt the information requirements for a sub-chronic toxicity (90-day) study (Annex IX, Section 8.6.2.), *in vitro* cytogenicity (Annex VIII, Section 8.4.2.), *in vitro* mammalian cell gene mutation study (Annex VIII, Section 8.4.3.), pre-natal developmental toxicity study (Annex IX, Section 8.7.2.) and long-term toxicity to aquatic invertebrates (Annex IX, 9.4.1) by applying a read-across approach in accordance with Annex XI, Section 1.5.

According to Annex XI, Section 1.5., two conditions shall be necessarily fulfilled. Firstly, there needs to be structural similarity between substances which results in a likelihood that the substances have similar physicochemical, toxicological and ecotoxicological properties so that the substances may be considered as a group or category. Secondly, it is required that the relevant properties of a substance within the group may be predicted from data for reference substance(s) within the group (read-across approach). ECHA considers that the generation of information by such alternative means should offer equivalence to prescribed tests or test methods.

Based on the above, a read-across hypothesis needs to be provided. This hypothesis establishes why a prediction for a toxicological or ecotoxicological property is reliable and should be based on recognition of the structural similarities and differences between the source and registered substances[2]. This hypothesis explains why the differences in the chemical structures should not influence or underestimate the toxicological or ecotoxicological properties. The read-across approach must be justified scientifically and documented thoroughly, also taking into account the differences in the chemical structures. There may be several lines of supporting evidence used to justify the read-across hypothesis, with the aim of strengthening the case.

[2] Please see for further information ECHA *Guidance on information requirements and chemical safety assessment* (version 1, May 2008), Chapter R.6: QSARs and grouping of chemicals.

Due to the different nature of each endpoint and consequent difference in scientific considerations (*e.g.* key parameters, biological targets), a read-across must be specific to the endpoint or property under consideration. Key physicochemical properties may determine the fate of a compound, its partitioning into a specific phase or compartment and largely influence the availability of compounds to organisms, *e.g.* in bioaccumulation, bioavailability and toxicity testing. Similarly, biotic and abiotic degradation may alter the fate and bioavailability of compounds as well as produce degradation products which may be themselves hazardous, bioaccumulative and/or persistent. Thus, physicochemical and degradation properties influence the human health and environmental properties of a substance and should be considered in read-across assessments. However, the information on physicochemical and degradation properties is only a part of the read-across hypothesis, and it is necessary to provide additional justification which is specific to the endpoint or property under consideration.

The ECHA Read-across assessment framework foresees that there are two options which may form the basis of the read-across hypothesis[3] (1) (Bio)transformation to common compound(s) - the read-across hypothesis is that different substances give rise to (the same) common compounds to which the organism is exposed and (2) Different compounds have the same type of effect(s) - the read-across hypothesis is that the organism is exposed to different compounds which have similar (eco)toxicological and fate properties as a result of structural similarity (and not as a result of exposure to common compounds).

Finally, Annex XI, Section 1.5. lists several additional requirements, which deal with the quality of the studies which are used as source to be read-across from.

You consider to achieve compliance with the REACH information requirements for the registered substance bis(2-ethylhexyl)succinate (EC 220-836-1) (CAS No 2915-57-3) using data of structurally similar bis(2-ethylhexyl) adipate, EC No 203-090-1 (CAS No 103-23-1) (hereafter referred to as the 'source substance').

a) Your grouping and read-across approach for toxicological information

You have provided a read-across justification documentation, within a separate attachment entitled: "[redacted]", prepared by [redacted]. This document is dated on 9 May 2013, and it is located in the endpoint summary of IUCLID section 7.1 Toxicokinetics, metabolism and distribution.

You use the following arguments to support the prediction of properties of the registered (target) substance subject to this decision from data for the source substance:

" No ADME or repeat dose toxicology is available for the registered substance, however read-across is proposed from substance bis(2-ethylhexyl)adipate (CAS 103-23-1) which is structurally identical bar an extension of the central carbon chain by two carbons (see Table 1 below).

[3] Please see ECHA's Read-Across Assessment Framework (https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across).

With respect to key properties relating to absorption and metabolism, the physical chemical properties are, for practical purposes, identical (MW, Pow, solubility), as is the ready biodegradability of the substances (again see Table 1 for a comparison of the properties). Given the aliphatic nature of both materials and the identical ester bonds, it is considered that mammals will deal with each in an identical fashion, starting with cleavage of the esters, and then metabolism of the aliphatic chains in peroxisomes (branched chain fatty acids) and mitochondria (straight chain fatty acids). The read-across substance was biodegraded at a slower rate than the substance, which if anything, indicates that the adipate provides a worst case scenario with regards to toxicology, taking longer to metabolise and clear. [...]

After systemic absorption, rapid and complete metabolism to endogenous substances or waste products is likely to ensue."

"The substance, or the read-across substance, were not considered mutagenic in studies that were adequately conducted."

As an integral part of these predictions, you propose that the source and registered substances have similar properties for the above-mentioned information requirements. ECHA considers that this information is your read-across hypothesis.

ECHA understands that your read-across approach is mainly based on the structural similarity of the registered (target) substance and the source substance that differ in the central carbon chain by two carbons. Your hypothesis is supported by the arguments that both substances are metabolised in an "*identical fashion*" to endogenous substances or "*waste products*" and that the source substance is worst case with regard to toxicity because the source substance is biodegraded at a slower rate than the registered substance.

However, you have not demonstrated with factual evidence and documentation why the differences in the parent target and source substance chemical structures should not influence the toxicological / ecotoxicological properties or should do so in a regular pattern. Your arguments used to justify the read-across hypothesis will be discussed further below.

Toxicokinetics

You argue that the registered substance and the source substance are metabolised rapidly and completely into endogenous substances and "*waste products*". However, you did not provide any substance-specific documentation in support of the suggested toxicokinetic behaviour. Furthermore, even if substances are metabolised via similar metabolic pathways, this does not allow any conclusion on similar toxicological properties of the parent (not metabolised) substances. Hence, a thorough documentationto support your read-across hypothesis, that the properties of the registered substance can be predicted from data of the source substance, has not been provided.

Furthermore, you assume that the source substance is representing a worst-case scenario with regard to toxicology due to a slower biodegradation rate compared to the target substance. However, you did not provide any further information or evidence to support this claim. Hence, you have not provided a thorough documentation to support your read-across hypothesis, which is that the properties of the registered substance can be predicted from data of the claimed worst-case with respect to toxicological properties.

Mutagenicity

As indicated above under 'Toxicokinetics', the assumed worst-case scenario with regard to toxicity has not been adequately demonstrated and documented. In addition, target substance mutagenic properties have been investigated only by a bacterial reverse mutation study and additional supporting evidence to justify why and how the mutagenic properties of the target substance could be predicted from the source substance is necessary. Therefore, there is currently not a reliable basis for predicting the properties of the registered substance with respect to mutagenicity.

Repeated dose toxicity

You have provided a sub-chronic toxicity study (90 days) performed with the source substance. However, you have not provided any toxicological information relevant to systemic toxicity with the registered substance (*e.g.*, a sub-acute toxicity study or an OECD TG 422 combined screening study). Hence, you did not demonstrate that the registered substance and the source substance have similar toxicological properties. Therefore, here is not a reliable basis for predicting the properties of the registered substance with respect to repeated dose toxicity.

Developmental toxicity

You have provided a pre-natal developmental toxicity study according to OECD TG 414, performed with the source substance. However, you have not provided any toxicological information relevant to developmental toxicity with the target substance (*e.g.*, an OECD TG 421 or 422 screening study). Hence, you did not demonstrate that the registered substance and the source substance have similar toxicological properties with respect to effects on development. Therefore, there is not a reliable basis for predicting the properties of the registered substance with respect to developmental toxicity.

b) Your grouping and read-across approach for ecotoxicological information

Long-term toxicity to aquatic invertebrates

You have not provided any documentation or justification for your use of the analogue data for filling the data gap for the long-term toxicity to aquatic toxicity with a source substance apart from the following statement: "*The study was conducted to GLP and a standardised guideline. Since the study was conducted with the structural analogue, bis(2-ethylhexyl) adipate, it was assigned a reliability score of 2 and considered suitable for assessment as an accurate reflection of the test substance.*"

Hence, you did not demonstrate that the registered substance and the source substance have similar ecotoxicological properties and that the hazardous properties of the registered substance are not underestimated in the risk assessment by using the information from the source substance.
In addition, a structural similarity between source and target substance *per se* is not sufficient to enable the prediction of environmental properties of the registered substance. Therefore, you have not established why a prediction for chronic aquatic toxicity is reliable.

c) Conclusion on the grouping and read-across approach

For the reasons as set out above, ECHA considers that this grouping and read-across approach does not provide a reliable basis whereby the human health and environmental effects / environmental fate of the registered substance may be predicted from data for the source substance. Hence, this approach does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. of the REACH Regulation.

As described above, further elements are needed to establish a reliable prediction for toxicological or ecotoxicological properties, based on recognition of the structural similarities and differences between the source and registered substances. This could be achieved (if it is possible) by a well-founded hypothesis of (bio)transformation to common compound(s), or that the registered and source substance(s) have the same type of effect(s), together with sufficient supporting information to allow a prediction of human health and environmental properties.

1. In vitro cytogenicity study in mammalian cells or in vitro micronucleus study (Annex VIII, Section 8.4.2.)

An "*In vitro* cytogenicity study in mammalian cells or an *in vitro* micronucleus study" is a standard information requirement as laid down in Annex VIII, Section 8.4.2. of the REACH Regulation. Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

You have sought to adapt this information requirement according to Annex XI, Section 1.5. of the REACH Regulation by providing a study record for a Mammalian Erythrocyte Micronucleus Test (OECD TG 474) with the analogue substance bis(2-ethylhexyl) adipate (EC no 203-090-1). However, as explained above in Appendix 1, section "Grouping and read-across approach for toxicological and ecotoxicological information" of this decision, your adaptation of the information requirement is rejected.

As explained above, the information provided on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently, there is an information gap and it is necessary to provide information for this endpoint.

ECHA considers that the *in vitro* mammalian chromosome aberration test (test method OECD TG 473) and the *in vitro* mammalian cell micronucleus test (OECD TG 487) are appropriate to address the standard information requirement of Annex VIII, Section 8.4.2. of the REACH Regulation.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: *In vitro* mammalian chromosome aberration test (test method: OECD TG 473) or *in vitro* mammalian cell micronucleus study (test method: OECD TG 487).

2. In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.)

An "*In vitro* gene mutation study in mammalian cells" is an information requirement as laid down in Annex VIII, Section 8.4.3. of the REACH Regulation, "if a negative result in Annex VII, Section 8.4.1. and Annex VIII, Section 8.4.2." is obtained.

Therefore, adequate information *on in vitro* gene mutation in mammalian cells needs to be present in the technical dossier for the registered substance to meet this information requirement provided that the study requested under 1 has a negative result.

You have sought to adapt this information requirement according to Annex XI, Section 1.5. of the REACH Regulation by providing a study record for an In Vitro Mammalian Cell Gene Mutation Test (OECD TG 476) with the analogue substance bis(2-ethylhexyl) adipate (EC no 203-090-1). However, as explained above in Appendix 1, section "Grouping and read-across approach for toxicological and ecotoxicological information" of this decision, your adaptation of the information requirement is rejected. ECHA notes that the registration dossier does therefore not contain appropriate study records for these information requirements.

As explained above, the information provided on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently, there is an information gap and it is necessary to provide information for this endpoint.

ECHA considers that the *in vitro* mammalian cell gene mutation tests using the *Hprt* and *xprt* genes (OECD TG 476) and the *in vitro* mammalian cell gene mutation tests using the thymidine kinase gene (OECD TG 490) are appropriate to address the standard information requirement of Annex VIII, Section 8.4.3.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: *In vitro* mammalian cell gene mutation test (test method: OECD TG 476 *or* OECD TG 490) provided that the study requested under 1 has a negative result.

3. Sub-chronic toxicity study (90-day), oral route (Annex IX, Section 8.6.2.)

A "sub-chronic toxicity study (90 day)" is a standard information requirement as laid down in Annex IX, Section 8.6.2. of the REACH Regulation. Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

You have sought to adapt this information requirement according to Annex XI, Section 1.5. of the REACH Regulation by providing study records for "Carcinogenesis Bioassay of Di(2-ethylhexyl) Adipate" (equivalent or similar to OECD TG 408) in rat and mice, respectively, with the analogue substance bis(2-ethylhexyl) adipate (EC no 203-090-1).

You have provided the following specific justification for the adaptation:

"In accordance with Section 1 of Annex XI a subchronic toxicity study, as required under Section 8.6.2 of Annex IX, does not appear scientifically necessary. The existing oral data is considered to adequately address the repeated dose toxicity endpoint and a further 90-day study is regarded as unnecessary."

However, as explained above in Appendix 1, section "Grouping and read-across approach for toxicological and ecotoxicological information" of this decision, your adaptation does not meet the general rule for adaptation of Annex XI; Section 1.5.

In addition, Annex XI, Section 1.5 provides with regard to the reliability and adequacy of the source studies that in all cases the results of the 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),*
- *cover an exposure duration comparable to or longer than the corresponding test method referred to in Article 13(3) if exposure duration is a relevant parameter, and*
- *adequate and reliable documentation of the applied method shall be provided.*

According to the provisions of Annex IX, Section 8.6.2., information on sub-chronic toxicity (90-day) as specified in the OECD TG 408 shall be provided. ECHA notes that the source study that you have used in your read-across approach, Carcinogenesis Bioassay of Di(2-ethylhexyl) Adipate ([redacted] 1982), is not equivalent or similar to the OECD test guideline 408. ECHA points out that the provided study is not conducted according to good laboratory practice (GLP). Furthermore, the study does not cover all the parameters, which are addressed in a standard sub-chronic (90d) toxicity study. More notably, haematology, blood parameters and organ weights were not analysed. In addition, gross pathological findings and investigated organs have not been specified. Therefore, the study does not provide an adequate coverage of the key parameters expected to be investigated in a study performed according to the OECD TG 408. Therefore, ECHA considers that this source study does not fulfil the requirement of Annex XI, Section 1.5. of the REACH Regulation for an adequate and reliable coverage of the key parameters addressed in the corresponding test method referred to in Article 13(3).

Therefore, your adaptation of the information requirement is rejected.

As explained above, the information provided on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently, there is an information gap and it is necessary to provide information for this endpoint.

ECHA has evaluated the most appropriate route of administration for the study. Based on the information provided in the technical dossier and/or in the chemical safety report, ECHA considers that the oral route - which is the preferred one as indicated in ECHA Guidance on information requirements and chemical safety assessment (version 6.0, July 2017) Chapter R.7a, Section R.7.5.4.2 - is the most appropriate route of administration. More specifically, the substance is a liquid of very low vapour pressure. Uses with industrial and professional spray application are reported in the chemical safety report. However, the reported concentrations are low (<[redacted]%). Hence, the test shall be performed by the oral route using the test method EU B.26./OECD TG 408.

According to the test method EU B.26./OECD TG 408 the rat is the preferred species. ECHA considers this species as being appropriate and testing should be performed with the rat.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Repeated dose 90-day oral toxicity study (test method: EU B.26./OECD TG 408) in rats.

4. Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.) in a first species

A "pre-natal developmental toxicity study" (test method EU B.31./OECD TG 414) for a first species is a standard information requirement as laid down in Annex IX, Section 8.7.2. of the REACH Regulation. Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

You have sought to adapt this information requirement according to Annex XI, Section 1.5. of the REACH Regulation by providing a study record for a prenatal developmental toxicity study (OECD TG 414) with the analogue substance bis(2-ethylhexyl)adipate (EC no 203-090-1). However, as explained above in Appendix 1, section "Grouping and read-across approach for toxicological and ecotoxicological information" of this decision, your adaptation of the information requirement is rejected.

As explained above, the information provided on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently, there is an information gap and it is necessary to provide information for this endpoint.

Furthermore, ECHA notes that 2-ethylhexanoic acid is a potential metabolite of the registered substance bis(2-ethylhexyl)succinate. This potential metabolite has a harmonised classification for developmental toxicity (Repro 2; H361d). In the pre-natal developmental toxicity study with the source substance (bis(2-ethylhexyl)adipate), developmental effects (reduced ossification and visceral variations) were reported also at maternal non-toxic doses. Even though the read-across from 2(ethylhexyl)adipate is rejected due to lack of evidence for an adequate prediction, this information provides evidence raising concern that exposure to the registered substance might lead to developmental toxic effects.

According to the test method EU B.31./OECD TG 414, the rat is the preferred rodent species and the rabbit the preferred non-rodent species. On the basis of this default assumption ECHA considers testing should be performed with rats or rabbits as a first species.

ECHA considers that the oral route is the most appropriate route of administration for substances except gases to focus on the detection of hazardous properties on reproduction as indicated in ECHA *Guidance on information requirements and chemical safety assessment* (version 6.0, July 2017) Chapter R.7a, Section R.7.6.2.3.2. Since the substance to be tested is a liquid, ECHA concludes that testing should be performed by the oral route.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Pre-natal developmental toxicity study (test method: EU B.31./OECD TG 414) in a first species (rat or rabbit) by the oral route.

5. Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.)

"Long-term toxicity testing on aquatic invertebrates" is a standard information requirement as laid down in Annex IX, Section 9.1.5. of the REACH Regulation. Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

You have sought to adapt this information requirement according to Annex XI, Section 1.5. of the REACH Regulation by providing a study record entitled: [redacted] *Daphnia magna* (nach OECD-Guideline 202 Teil II), [redacted]., 1996, with the analogue substance bis(2-ethylhexyl) adipate (EC no 203-090-1).

However, as explained above in Appendix 1, section "Grouping and read-across approach for toxicological and ecotoxicological information", your adaptation of the information requirement cannot be accepted.

As explained above, the information provided on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently there is an information gap and it is necessary to provide information for this endpoint.

According to ECHA Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 4.0, June 2017) *Daphnia magna* reproduction test (test method EU C.20. / OECD TG 211) is the preferred test to cover the standard information requirement of Annex IX, Section 9.1.5.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Daphnia magna reproduction test (test method: EU C.20./OECD TG 211).

Notes for your consideration

Once results of the test on long-term toxicity to aquatic invertebrates are available, you shall revise the chemical safety assessment as necessary according to Annex I of the REACH Regulation.

Due to the low solubility of the substance in water you should consult OECD Guidance Document on Aquatic Toxicity Testing of Difficult Substances and Mixtures, ENV/JM/MONO (2000)6 and ECHA Guidance on information requirements and chemical safety assessment (version 4.0, June 2017), Chapter R7b, Table R.7.8-3 summarising aquatic toxicity testing of difficult substances for choosing the design of the requested ecotoxicity test(s) and for calculation and expression of the result of the test(s).

6. Long-term toxicity testing on fish (Annex IX, Section 9.1.6.1.)

"Long-term toxicity testing on fish" is a standard information requirement as laid down in Annex IX, Section 9.1.6. of the REACH Regulation. Adequate information on Fish, early-life stage (FELS) toxicity test (Annex IX, 9.1.6.1.), or Fish, short-term toxicity test on embryo and sac-fry stages (Annex IX, 9.1.6.2.), or Fish, juvenile growth test (Annex IX, 9.1.6.3.) needs to be present in the technical dossier for the registered substance to meet this information requirement.

You have sought to adapt this information requirement according to Annex IX, Section 9.1.6., column 2. You provided the following justification for the adaptation *"In accordance with Column 2, the long-term toxicity test on fish study (as required in Section 9.1.6) does not appear scientifically necessary. The data are not required as the risk assessment performed concludes that the substance is of no immediate concern to the environment and its potential to cause long-term adverse effects on aquatic organisms is considered to be low as it is readily biodegradable."*

However, ECHA notes that your adaptation does not meet the specific rules for adaptation under Annex IX, Section 9.1.6., column 2 because there are no long-term aquatic toxicity studies available with the registered substance. In your risk assessment, you have used NOEC and PNEC derived from a long-term toxicity study on *Daphnia magna* conducted with an analogue substance. However, as explained above in Appendix 1, section "Grouping and read-across approach for toxicological and ecotoxicological information", your adaptation of the information requirement of the long-term toxicity on aquatic invertebrates according to Annex XI, 1.5 was not accepted, and therefore there is lack of information on the chronic aquatic toxicity in your technical dossier and consequently the chemical safety assessment is not valid.

Therefore, your adaptation of the information requirement cannot be accepted.

As explained above, the information provided on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently there is an information gap and it is necessary to provide information for this endpoint.

According to ECHA Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 4.0, June 2017) fish early-life stage (FELS) toxicity test (test method OECD TG 210), fish short-term toxicity test on embryo and sac-fry stages (test method EU C.15. / OECD TG 212) and fish juvenile growth test (test method EU C.14. / OECD TG 215) are the preferred tests to cover the standard information requirement of Annex IX, Section 9.1.6.

However, the FELS toxicity test according to OECD TG 210 is more sensitive than the fish, short-term toxicity test on embryo and sac-fry stages (test method EU C.15 / OECD TG 212), or the fish, juvenile growth test (test method EU C.14. / OECD TG 215), as it covers several life stages of the fish from the newly fertilized egg, through hatch to early stages of growth (see ECHA Guidance on information requirements and chemical safety assessment (version 4.0, June 2017), Chapter R7b, Figure R.7.8-4).

Moreover, the FELS toxicity test is preferable for examining the potential toxic effects of substances which are expected to cause effects over a longer exposure period, or which require a longer exposure period of time to reach steady state (ECHA Guidance Chapter R7b, version 4.0, June 2017).

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Fish, early-life stage (FELS) toxicity test (test method: OECD TG 210).

Notes for your consideration

Once results of the test on long-term toxicity to fish are available, you shall revise the chemical safety assessment as necessary according to Annex I of the REACH Regulation.

ECHA notes that due to lack of effects in short-term studies it is not possible to determine the sensitivity of species. Therefore, the Integrated testing strategy (ITS) outlined in ECHA *Guidance on information requirements and chemical safety assessment* (version 4.0, June 2017), Chapter R7b (Section R.7.8.5 including Figure R.7.8-4), is not applicable in this case and the long-term studies on both invertebrates and fish are requested to be conducted. As the registered substance has a reported low water solubility, long-term studies are indicated.

Due to the low solubility of the substance in water you should consult OECD Guidance Document on Aquatic Toxicity Testing of Difficult Substances and Mixtures, ENV/JM/MONO (2000)6 and ECHA Guidance on information requirements and chemical safety assessment (version 4.0, June 2017), Chapter R7b, Table R.7.8-3 summarising aquatic toxicity testing of difficult substances for choosing the design of the requested ecotoxicity test(s) and for calculation and expression of the result of the test(s).

Appendix 2: Procedural history

For the purpose of the decision-making, this decision does not take into account any updates of your registration after the date when the draft decision was notified to you under Article 50(1) of the REACH Regulation.

The compliance check was initiated on 28 March 2017.

The decision making followed the procedure of Articles 50 and 51 of the REACH Regulation, as described below:

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

ECHA did not receive any comments by the end of the commenting period.

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

As no amendments were proposed, ECHA took the decision according to Article 51(3) of the REACH Regulation.

Appendix 3: Further information, observations and technical guidance

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

2. Failure to comply with the requests in this decision, or to otherwise fulfil the information requirements with a valid and documented adaptation, will result in a notification to the enforcement authorities of your Member State.

3. In carrying out the tests required by the present decision, it is important to ensure that the particular sample of substance tested is appropriate to assess the properties of the registered substance, taking into account any variation in the composition of the technical grade of the substance as actually manufactured or imported. If the registration of the substance covers different grades, the sample used for the new tests must be suitable to assess these.

   Furthermore, there must be adequate information on substance identity for the sample tested and the grades registered to enable the relevance of the tests to be assessed.