

Helsinki, 7 March 2018

Addressee: [REDACTED]

Decision number: CCH-D-2114394441-48-01/F

Substance name: 1,3-dioxepane

EC number: 208-015-6

CAS number: 505-65-7

Registration number: [REDACTED]

Submission number: [REDACTED]

Submission date: 15/09/2017

Registered tonnage band: Over 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

- 1. Pre-natal developmental toxicity study (Annex X, Section 8.7.2.; test method: EU B.31./OECD TG 414) in a second species (rabbit), oral route with the registered substance;**
- 2. Extended one-generation reproductive toxicity study (Annex X, Section 8.7.3.; test method: EU B.56./OECD TG 443) in rats, oral route with the registered substance specified as follows:**
 - **Ten weeks pre-mating exposure duration for the parental (P0) generation;**
 - **Dose level setting shall aim to induce some toxicity at the highest dose level;**
 - **Cohort 1A (Reproductive toxicity);**
 - **Cohort 1B (Reproductive toxicity) without extension to mate the Cohort 1B animals to produce the F2 generation**
- 3. Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.; test method: Fish, acute toxicity test, OECD TG 203) with the registered substance;**
- 4. Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.; test method: Daphnia sp. Acute immobilisation test, EU C.2./OECD TG 202) with the registered substance;**

¹ No testing for endpoints listed in Annexes IX or X to the REACH Regulation may be started or performed at this moment: A decision only becomes legally effective and binding for you after it has been adopted according to Article 51 of the REACH Regulation. ECHA will take the decision either after the date it has become clear that Member State competent authorities have not made any proposals to amend the draft decision or, where proposals to amend it have been made, after the date the Member State Committee reached a unanimous agreement on the draft decision.

- 5. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.; test method: Alga, growth inhibition test, EU C.3./OECD TG 201) with the registered substance;**
- 6. Identification of degradation products (Annex IX, Section 9.2.3.)**

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 **15 March 2021**. 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>.

Authorised² by Kevin Pollard, Head of Unit, Evaluation E1

² 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

(ECO)TOXICOLOGICAL INFORMATION

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

1. Pre-natal developmental toxicity study (Annex X, Section 8.7.2.) in a second species

Pre-natal developmental toxicity studies (test method EU B.31./OECD TG 414) on two species are part of the standard information requirements for a substance registered for 1000 tonnes or more per year (Annex IX, Section 8.7.2., column 1, Annex X, Section 8.7.2., column 1, and sentence 2 of introductory paragraph 2 of Annex X of the REACH Regulation).

The technical dossier contains information on a pre-natal developmental toxicity study in rats by the inhalation route using the registered substance as test material.

However, there is no information provided for a pre-natal developmental toxicity study in a second species.

The technical dossier does not contain an adaptation in accordance with column 2 of Annex X, Section 8.7.2. or with the general rules of Annex XI for this standard information requirement.

In your updated dossier (██████████) you seek to adapt the information requirement for this endpoint according to Annex XI, Section 3, of the REACH Regulation. This adaptation is also outlined in your comments to the draft decision according to Article 50(1) of the REACH Regulation.

In support of your adaptation you state that manufacture and polymerization of 1,3-dioxepane is performed in a closed system. You also make a qualitative exposure assessment for workers based on the physico-chemical properties and the exposure limit values of dangerous substances (such as formaldehyde) and which are resulting in co-exposures during the manufacturing and polymerization processes of 1,3-dioxepane. You argue that risk management measures implemented to reduce or avoid direct and indirect exposure of workers to these dangerous substances are sufficiently protective to prevent from any hazard identified for dioxepane. The facility used is a modern multi-purpose polymerization reactor plant for manufacture of polymers using hazardous substances like formaldehyde, styrene and acrylamide. The qualitative risk assessment is substantiated by measured data.

Similarly, a qualitative exposure assessment for consumers based on the potential release of 1,3-dioxepane from consumer applications of the polymer is provided. Consumer exposure due to potential residual 1,3-dioxepane monomer in the polymer is addressed by migration measurements under all anticipated use conditions of the polymer. You argue that migration from the polymer is below (or rarely slightly above) the detection limit of 1 ppm, and you conclude that no consumer applications of the monomeric 1,3-dioxepane exist.

ECHA notes that you have provided the justification for your adaptation in accordance with Annex XI, Section 3.2., only in IUCLID section 7.8.2 of the updated dossier. However, as the Chemical safety report has not been updated to support the reasoning that exposures are not significant, ECHA is not in a position to conclude on the adaptation. Consequently, your adaptation according to Annex XI, Section 3.2 is rejected as the adequate justification based on a thorough and rigorous exposure assessment in accordance with section 5 of Annex I REACH is missing

Hence, 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.

The test in the first species was carried out by using a rodent species (rat). According to the test method EU B.31./OECD 414, the rabbit is the preferred non-rodent species. On the basis of this default assumption, ECHA considers that the test should be performed with rabbit as a second 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 5.0, December 2016) 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 second species (rabbit) by the oral route.

2. Extended one-generation reproductive toxicity study (Annex X, Section 8.7.3.)

The basic test design of an extended one-generation reproductive toxicity study (test method EU B.56./OECD TG 443 with Cohorts 1A and 1B, without extension of Cohort 1B to include a F2 generation, and without Cohorts 2A, 2B and 3) is a standard information requirement as laid down in column 1 of 8.7.3., Annex X. If the conditions described in column 2 of Annex X are met, the study design needs to be expanded to include the extension of Cohort 1B, Cohorts 2A/2B, and/or Cohort 3. Further detailed guidance on study design and triggers is provided in the ECHA *Guidance on information requirements and chemical safety assessment* Chapter R.7a, Section R.7.6 (version 5.0, December 2016).

Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

a) *The information provided*

You have not provided any study record of an extended one-generation reproductive toxicity study in the dossier that would meet the information requirement of Annex X, Section 8.7.3.

ECHA notes your tiered testing strategy to fulfil the information requirement in column 1 of 8.7.3., Annex X. However, you have not properly flagged the planned experimental study in the registration dossier.

In IUCLID section 8.7.1 you have stated that *"An adequate decision on appropriate testing strategy for fertility is not possible based on available data. Decision on testing for toxicity to fertility based on tiered testing strategy to cover REACH Annex IX/X studies as outlined in End Point Summary."* Furthermore, you have stated that testing according to "OECD guideline 443: Extended one-generation reproductive toxicity study in rats, oral route is *"Optional based on study outcome of pre-natal developmental toxicity study and subchronic inhalation study. See End point Summary for detailed, tiered testing proposal to cover REACH Annex IX/X studies"*. More specifically, you have stated under endpoint summary of IUCLID section 8.7 that *"The decision on the adequate test design of a fertility study should be dependent on the outcome of the subchronic and the developmental toxicity studies 1-3:-- in case no effects on the male/female reproductive system will be observed, an OECD 421 screening assay is proposed in order to finally and reliably address the toxicity of 1,3-dioxepane to fertility. In case no effects on reproductive organs or reproductive function were observed in all 3 studies (subchronic, developmental, fertility screening) the testing strategy would require no further animal assays. In absence of a structural alert a scientifically sound and reliable conclusion on the toxicity of 1,3-dioxepane to fertility can be derived. With respect to animal welfare, additional testing on toxicity to fertility without any scientific concern is therefore not advisable. **or***
-- in case effects on the male/female reproductive organs or reproductive function will be observed in any of the preceding studies an extended one generation fertility study in rats according to the OECD guideline 443 (an alternative to the two-generation fertility study, OECD416)is proposed to verify these results.

The described testing strategy is combining the principles of a sound scientific assessment of toxicity to fertility together with the requirements of animal welfare. As outlined in Article 25 of the REACH Regulation, testing on vertebrate animals shall be undertaken only as a last option. Based on recent scientific publications in renowned peer reviewed journals a reliable and animal saving assessment of the toxicity to fertility can be obtained by appropriate study designs and testing strategies. For example when male fertility is affected, histopathology of the reproductive organs has been shown to be a highly sensitive endpoint ([REDACTED]). No additional information on fertility can be expected from higher tier reproductive toxicity studies and with respect to animal welfare the performance is not advisable. Furthermore a second generation neither had an impact on the justification of classification nor on the overall NOAEL ([REDACTED])".

ECHA notes that in the registration dossier you have provided a sub-chronic toxicity study (OECD TG 413) in rats (██████████ 2015) and a prenatal developmental toxicity study (OECD TG 414) in rats (██████████ 2015) both performed by inhalation exposure. While you have not explicitly claimed an adaptation, you have provided information that could be interpreted as an attempt to adapt the information requirement according to Annex XI, Section 1.2., weight of evidence. Hence, ECHA has evaluated your adaptation with respect to this adaptation.

b) ECHA's evaluation and conclusion of the information provided

Evaluation approach/criteria

An adaptation pursuant to Annex XI, Section 1.2. requires sufficient weight of evidence from several independent sources of information leading to the assumption/conclusion that a substance has or has not a particular dangerous property with respect to the information requirement in question including an adequate and reliable documentation while the information from each single source alone is regarded insufficient to support this notion.

Your weight of evidence adaptation needs to address the specific dangerous (hazardous) properties of the registered substance with respect to an extended one-generation reproductive toxicity study (EU B.56./OECD TG 443) as requested in this decision. ECHA considers that this study provides, in addition to information to general toxicity, information in particular on two aspects, namely on sexual function and fertility in P0 and F1 generations (further referred to as 'sexual function and fertility') and on development and toxicity of the offspring from birth until adulthood due to pre- and postnatal and adult exposure in the F1 generation (further referred to as 'effects on offspring').

Relevant elements for 'sexual function and fertility' are in particular functional fertility (oestrous cycle, sperm parameters, mating behaviour, conception, pregnancy, parturition, and lactation) in the parental generation after sufficient pre-mating exposure duration and histopathological examinations of reproductive organs in both P0 and F1 generations. Relevant elements for 'effects on offspring' are in particular peri- and post-natal investigations of the F1 generation up to adulthood including investigations to detect certain endocrine modes of action, sexual development. Also the sensitivity and depth of investigations to detect effects on 'sexual function and fertility' and 'effects on offspring' needs to be considered.

Furthermore, as indicated in ECHA *Guidance on information requirements and chemical safety assessment* Chapter R.4., Section 4.4 (version 1.1, December 2011), ECHA has evaluated individually your provided sources of information with respect to relevance and reliability and has evaluated the overall provided information for consistency and coverage of the relevant elements as specified above.

Sexual function and fertility

With respect to the sexual function and fertility, you have only provided information on the histopathological changes in the main reproductive organs (OECD TG 413 inhalation sub-chronic toxicity study) in P0 generation. However, the statistical power of information provided is lower than that expected from the extended one-generation reproductive toxicity study, you have not provided any information on the functional fertility and information on sperm parameters in P0 generation, sexual maturation and histopathology of the reproductive organs in F1 generation.

Effects on offspring

With respect to effects on offspring, you have not provided information to cover the key elements of the peri-, postnatal toxicity in F1 generation up to adulthood including certain endocrine modes of action. The OECD TG 414 study provides information on prenatal developmental toxicity but not on peri- or postnatal toxicity up to adulthood, which is an essential part of reproductive toxicity of F1 animals.

The literature references cited in your justification do neither contain information on the registered substance nor do you explain why and how the information on various aspects of reproduction provided by an extended one-generation reproductive toxicity study could be replaced or predicted for your substance on histopathological examination only. Thus, the information you provided does not adequately address all relevant elements with respect to sexual function and fertility, and effects on offspring.

Hence, the sources of information you provided, do not allow to assume/conclude on the dangerous (hazardous) property of the registered substance with respect to the information requirement for Annex X, Section 8.7.3. Therefore, the general rules for adaptation laid down in Annex XI, Section 1.2. of the REACH Regulation are not met and your adaptation of the information requirement is rejected.

Therefore, 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. Thus, an extended one-generation reproductive toxicity study according Annex X, Section 8.7.3. is required. The following refers to the specifications of this required study.

c) The specifications for the study design

Premating exposure duration and dose-level setting

To ensure that the study design adequately addresses the fertility endpoint, the duration of the pre-mating exposure period and the selection of the highest dose level are key aspects to be considered. According to ECHA Guidance, the starting point for deciding on the length of pre-mating exposure period should be ten weeks to cover the full spermatogenesis and folliculogenesis before the mating, allowing meaningful assessment of the effects on fertility.

Ten weeks pre-mating exposure duration is required because there is no substance specific information in the dossier supporting shorter pre-mating exposure duration as advised in the *ECHA Guidance on information requirements and chemical safety assessment* Chapter R.7a, Section R.7.6 (version 5.0, December 2016).

The highest dose level shall aim to induce some toxicity to allow comparison of effect levels and effects of reproductive toxicity with those of systemic toxicity. The dose level selection should be based upon the fertility effects with the other cohorts being tested at the same dose levels.

If there is no existing relevant data to be used for dose level setting, it is recommended that results from a conducted range-finding study (or range finding studies) are reported with the main study. This will support the justifications of the dose level selections and interpretation of the results.

The study design must be justified in the dossier and, thus, the existence/non-existence of any conditions/triggers must be documented.

Species and route selection

According to the test method EU B.56./ OECD TG 443, the rat is the preferred species. On the basis of this default assumption, ECHA considers that testing should be performed in rats.

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 5.0, December 2016) 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.

d) Outcome

In your updated dossier (██████████) you seek to adapt the information requirement for this endpoint according to Annex XI, Section 3, of the REACH Regulation. This adaptation is also outlined in your comments to the draft decision according to Article 50(1) of the REACH Regulation.

In support of your adaptation you state that manufacture and polymerization of 1,3-dioxepane is performed in a closed system. You also make a qualitative exposure assessment for workers based on the physico-chemical properties and the exposure limit values of dangerous substances (such as formaldehyde) and which are resulting in co-exposures during the manufacturing and polymerization processes of 1,3-dioxepane. You argue that risk management measures implemented to reduce or avoid direct and indirect exposure of workers to these dangerous substances are sufficiently protective to prevent from any hazard identified for dioxepane. The facility used is a modern multi-purpose polymerization reactor plant for manufacture of polymers using hazardous substances like formaldehyde, styrene and acrylamide. The qualitative risk assessment is substantiated by measured data.

Similarly, a qualitative exposure assessment for consumers based on the potential release of 1,3-dioxepane from consumer applications of the polymer is provided. Consumer exposure due to potential residual 1,3-dioxepane monomer in the polymer is addressed by migration measurements under all anticipated use conditions of the polymer. You argue that migration from the polymer is below (or rarely slightly above) the detection limit of 1 ppm, and you conclude that no consumer applications of the monomeric 1,3-dioxepane exist.

ECHA notes that you have provided the justification for your adaptation in accordance with Annex XI, Section 3.2., only in IUCLID section 7.8.2 of the updated dossier. However, as the Chemical safety report has not been updated to support the reasoning that exposures are not significant, ECHA is not in a position to conclude on the adaptation. Consequently, your adaptation according to Annex XI, Section 3.2 is rejected as the adequate justification based on a thorough and rigorous exposure assessment in accordance with section 5 of Annex I REACH is missing.

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: Extended one-generation reproductive toxicity study (test method EU B.56./OECD TG 443), in rats, oral route, according to the following study-design specifications:

- Ten weeks pre-mating exposure duration for the parental (P0) generation;
- Dose level setting shall aim to induce some toxicity at the highest dose level;
- Cohort 1A (Reproductive toxicity);
- Cohort 1B (Reproductive toxicity) without extension to mate the Cohort 1B animals to produce the F2 generation

While the specifications for the study design are given above, you shall also submit with the new endpoint study record a scientific justification on each of the following aspects: 1) length of the pre-mating exposure duration and dose level selection, 2) reasons for why or why not Cohort 1B was extended, 3) termination time for F2 generation, and 4) reasons for why or why not Cohorts 2A/2B and/or Cohort 3 were included.

Notes for your consideration

The conditions to include the extension of Cohort 1B are currently not met. Furthermore, no triggers for the inclusion of Cohorts 2A and 2B (developmental neurotoxicity) and Cohort 3 (developmental immunotoxicity) were identified. However, you may expand the study by including the extension of Cohort 1B, Cohorts 2A and 2B and/or Cohort 3, if new information becomes available after this decision is issued to justify such an inclusion. Inclusion is justified if the new information shows triggers which are described in column 2 of Section 8.7.3., Annex X and further elaborated in ECHA *Guidance on information requirements and chemical safety assessment* Chapter R.7a, Section R.7.6 (version 5.0, December 2016). You may also expand the study to address a concern identified during the conduct of the extended one-generation reproduction toxicity study and also due to other scientific reasons in order to avoid a conduct of a new study. The justification for the expansion must be documented. The study design must be justified in the dossier and, thus, the existence/non-existence of the conditions/triggers must be documented.

3. Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.)

Short-term toxicity testing on fish is a standard information requirement as laid down in Annex VIII, Section 9.1.3. 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.

In the technical dossier you have provided a study record for the key study (reference title: "**[REDACTED]**"; static test type; no analytical monitoring of exposure concentrations of the substance performed). However, this study does not provide the information required by Annex VIII, Section 9.1.3., because it is not reliable as explained in the following.

ECHA notes that based on values of the vapour pressure and the Henry's law constant reported in the dossier substance has a tendency to evaporate from the water. Thus, ECHA considers that the substance has potential for being lost from the test system during aquatic toxicity testing. Therefore, in order to gather adequate results for the purpose of classification/labelling and risk assessment, analytical verification of exposure concentrations of the substance is necessary for the aquatic toxicity testing, especially for the static test design. However, in the registration dossier you have reported that in the key study analytical verification of exposure concentrations of the substance was not performed. Thus, ECHA considers that the results of the key study reported in the registration dossier are not adequate for the purpose of classification/labelling and risk assessment.

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.

In your comments on the draft decision according to Article 50(1) of the REACH Regulation, you agree that the key study provided in the technical dossier is not reliable.

Furthermore, ECHA observes that you intend to adapt standard information requirement for the short-term fish toxicity by providing results of predictions of the fish toxicity by Qualitative or Quantitative structure-activity relationship (QSAR) models together with the required documentation. ECHA reminds you that to ensure compliance with the information requirement, any such adaptation will need to have a scientific justification, referring and conforming to the appropriate rules in the Annex XI, section 1.3, and adequate and reliable documentation of the applied method. Please note that any relevant information needs to be included in the dossier.

According to ECHA Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 3.0, February 2016) fish acute toxicity test (test method EU C.1. / OECD TG 203) is the preferred test to cover the standard information requirement of Annex VIII, Section 9.1.3.

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: Fish, acute toxicity test (test method: EU C.1./OECD TG 203).

Notes for your consideration

Due to the volatility of the substance 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 3.0, February 2016), Chapter R7b, Table R.7.8-3 summarising aquatic toxicity testing of difficult substances for choosing the design of the requested ecotoxicity tests and for calculation and expression of the result of the tests.

4. Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.)

Short-term toxicity testing on aquatic invertebrates is a standard information requirement as laid down in Annex VII, Section 9.1.1. 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.

In the technical dossier you have provided a study record for the key study (reference title: "[REDACTED]"; static test type; no analytical monitoring of exposure concentrations of the substance performed). However, this study does not provide the information required by Annex VII, Section 9.1.1., because it is not reliable as explained in the following.

ECHA notes that based on values of the vapour pressure and the Henry's law constant reported in the dossier substance has a tendency to evaporate from the water. Thus, ECHA considers that the substance has potential for being lost from the test system during aquatic toxicity testing. Therefore, in order to gather adequate results for the purpose of classification/labelling and risk assessment, analytical verification of exposure concentrations of the substance is necessary for the aquatic toxicity testing, especially for the static test design. However, in the registration dossier you have reported that in the key study analytical verification of exposure concentrations of the substance was not performed. Thus, ECHA considers that the results of the key study reported in the registration dossier are not adequate for the purpose of classification/labelling and risk assessment.

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.

In your comments on the draft decision according to Article 50(1) of the REACH Regulation you agree that the key study provided in the technical dossier is not reliable.

Furthermore, ECHA observes that you intend to adapt standard information requirement for the short-term aquatic invertebrate toxicity by providing results of predictions of the aquatic invertebrates toxicity by QSAR models together with the required documentation. ECHA reminds you that to ensure compliance with the information requirement, any such adaptation will need to have a scientific justification, referring and conforming to the appropriate rules in the Annex XI, section 1.3, and adequate and reliable documentation of the applied method. Please note that any relevant information needs to be included in the dossier.

According to ECHA Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 3.0, February 2016) Daphnia sp. acute immobilisation test (test method EU C.2. / OECD TG 202) is the preferred test to cover the standard information requirement of Annex VII, Section 9.1.1.

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 sp. Acute immobilisation test, EU C.2./OECD TG 202).

5. Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)

Growth inhibition study aquatic plants is a standard information requirement as laid down in Annex VII, Section 9.1.2. 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.

In the technical dossier you have provided a study record for the key study (reference title: "**[REDACTED]**"; static test type; no analytical monitoring of exposure concentrations of the substance performed). However, this study does not provide the information required by Annex VII, Section 9.1.2., because it is not reliable as explained in the following.

ECHA notes that based on values of the vapour pressure and the Henry's law constant reported in the dossier substance has a tendency to evaporate from the water. Thus, ECHA considers that the substance has potential for being lost from the test system during aquatic toxicity testing. Therefore, in order to gather adequate results for the purpose of classification/labelling and risk assessment, analytical verification of exposure concentrations of the substance is necessary for the aquatic toxicity testing, especially for the static test design. However, in the registration dossier you have reported that in the key study analytical verification of exposure concentrations of the substance was not performed. Thus, ECHA considers that the results of the key study reported in the registration dossier are not adequate for the purpose of classification/labelling and risk assessment.

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.

In your comments on the draft decision according to Article 50(1) of the REACH Regulation, you agree that the key study provided in the technical dossier is not reliable.

Furthermore, ECHA observes that you intend to adapt standard information requirement for the growth inhibition study with aquatic plants by providing results of predictions of the algae toxicity by QSAR models together with the required documentation. ECHA reminds you that to ensure compliance with the information requirement, any such adaptation will need to have a scientific justification, referring and conforming to the appropriate rules in the Annex XI, section 1.3, and adequate and reliable documentation of the applied method. Please note that any relevant information needs to be included in the dossier.

According to ECHA Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 3.0, February 2016) Algae growth inhibition test (test method EU C.3. / OECD TG 201) is the preferred test to cover the standard information requirement of Annex VII, Section 9.1.2.

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: Algae growth inhibition test, EU C.3./OECD TG 201).

6. Identification of degradation products (Annex IX, 9.2.3.)

The identification of the degradation products is a standard information requirement according to column 1, Section 9.2.3. of Annex IX 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.

The biodegradation section in the technical dossier does not contain any information in relation to the identification of degradation products, nor an adaptation in accordance with column 2 of Annex IX, Sections 9.2 or 9.2.3. or with the general rules of Annex XI for this standard information requirement. Thus, ECHA notes that you have not provided any justification in your chemical safety assessment or in the technical dossier for why there is no need to provide information on the degradation products.

According to Annex IX, Section 9.2.3., column 2 of the REACH Regulation, identification of degradation products is not needed if the substance is readily biodegradable. ECHA notes that based on the information in the technical dossier, the registered substance is not readily biodegradable. ECHA considers that information on the identity of degradation products is needed in relation to the PBT/vPvB assessment.

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

In your comments on the draft decision according to Article 50(1) of the REACH Regulation you indicate your intention to provide in an updated version of your registration dossier results of the prediction of identity of degradation products by QSAR model together with the required documentation.

ECHA reminds you that to ensure compliance with the information requirement, any such adaptation will need to have a scientific justification, referring and conforming to the appropriate rules in the Annex XI, section 1.3, and adequate and reliable documentation of the applied method.

Regarding appropriate and suitable test method, the methods will have to be substance-specific. When analytically possible, identification, stability, behaviour, molar quantity of metabolites relative to the parent compound should be evaluated. In addition, degradation half-life, log Kow and potential toxicity of the metabolite may be investigated. You will need to provide a scientifically valid justification for the chosen method.

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:

Identification of the degradation products (Annex IX, Section 9.2.3.) by using an appropriate and suitable test method, as explained above in this section.

Notes for your consideration

Before providing the above information you are advised to consult the ECHA Guidance on information requirements and chemical safety assessment (version 3.0, February 2016), Chapter R.7b., Sections R.7.9.2.3 and R.7.9.4. These guidance documents explain that the data on degradation products is only required if information on the degradation products following primary degradation is required in order to complete the chemical safety assessment. Section R.7.9.4. further states that when substance is not fully degraded or mineralised, degradation products may be determined by chemical analysis.

Deadline to submit the requested information in this decision

In the draft decision communicated, the time indicated to provide the requested studies and submit the study results to ECHA in a dossier update 30 months from the date of adoption of the decision. In your comments on the draft decision, an extension of this timeline to 36 months is made to allow for planning of in life-phase in your own lab after receiving the final decision, sequential testing due to required range finding experiments in mated rats with the oral route of exposure, and in non-mated and mated rabbits, and a 10-week pre-mating period.

ECHA finds an extension of the deadline justifieand and agrees to this request.

Appendix 2: Procedural history

You attempted to update your registration with the submission number [REDACTED] on 28 April 2017. However, due to technical reasons this submission failed. You made a second update on 15 September 2017 with submission number [REDACTED].

The compliance check was initiated on 14 June 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 took into account your comments. Furthermore, due to the technical issues as described above, ECHA took exceptionally the update with submission number [REDACTED] into account.

Following your comments and update ECHA amended the requests, and agreed to amend the deadline for providing the information requested.

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.