~~Confidential~~

Helsinki, 28 May 2021

Addressees
Registrant(s) of JS_938-815-7 as listed in the last Appendix of this decision

Date of submission of the dossier subject to this decision
16/02/2015

Registered substance subject to this decision ("the Substance")
Substance name: Reaction mass of 4-hydroxybenzene-1,3-disulphonic acid and 4-hydroxybenzenesulphonic acid and sulphuric acid and water
List number: 938-815-7
CAS number: NS

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

DECISION ON A COMPLIANCE CHECK

Under Article 41 of Regulation (EC) No 1907/2006 (REACH), you must submit the information listed below, by the deadline of ***4 September 2023***.

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

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

1. In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.; test method: EU B.13/14. / OECD TG 471)

2. Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.; test method: EU C.2./OECD TG 202)

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

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

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

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

2. If negative results are obtained in tests performed for the information requirement of Annex VII, Section 8.4.1. and Annex VIII, Section 8.4.2. then: In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.; test method: OECD TG 476 or TG 490)

3. Justification for an adaptation of a Short-term repeated dose toxicity (28 days) based on the results of the Sub-chronic toxicity study (90 days) requested below (Annex VIII, Section 8.6.1.)

4. Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.; test method: EU B.64/OECD TG 422) by oral route, in rats

5. Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.; test method: OECD TG 203)

6. Adsorption/ desorption screening (Annex VIII, Section 9.3.1.; test method: OECD TG 106)

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

1. Sub-chronic toxicity study (90-day) (Annex IX, Section 8.6.2.; test method: OECD TG 408) by oral route, in rats

2. Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.; test method: OECD TG 414) by oral route, in one species (rat or rabbit)

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

4. Long-term toxicity testing on fish (Annex IX, Section 9.1.6.; test method: OECD TG 210)

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

- Appendix entitled "Reasons common to several requests";
- Appendices entitled "Reasons to request information required under Annexes VII to IX of REACH", respectively.

Information required depends on your tonnage band

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

- the information specified in Annexes VII 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.

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

How to comply with your information requirements

To comply with your information requirements you must submit the information requested by this decision in an updated registration dossier by the deadline indicated above. You must also update the chemical safety report, where relevant, including any changes to classification and labelling, based on the newly generated information.

You must follow the general testing and reporting requirements provided under the Appendix entitled "Requirements to fulfil when conducting and reporting new tests for REACH purposes". In addition, you should follow the general recommendations provided under the Appendix entitled "General recommendations when conducting and reporting new tests for REACH purposes". For references used in this decision, please consult the Appendix entitled "List of references".

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 Christel Schilliger-Musset, Director of Hazard Assessment

[1] As this is an electronic document, it is not physically signed. This communication has been approved according to ECHA's internal decision-approval process.

Appendix on Reasons common to several requests

1. Assessment of your read-across approach under Annex XI, Section 1.5. for the category approach 'Aromatic sulphonic acids and salts'

You seek to adapt the information requirements for the following standard information requirements by grouping substances in the category and applying a read-across approach in accordance with Annex XI, Section 1.5:

- In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.)
- In vitro cytogenicity study in mammalian cells or in vitro micronucleus study (Annex VIII, Section 8.4.2.)
- Short-term repeated dose toxicity (28 days; Annex VIII, Section 8.6.1.)
- Sub-chronic toxicity study (90-day) (Annex IX, Section 8.6.2.)
- Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.)
- Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.)
- Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.)

ECHA has considered the scientific and regulatory validity of your grouping and read-across approach in general before assessing the specific standard information requirements in the following appendices.

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 (addressed under 'Scope of the grouping'). Secondly, it is required that the relevant properties of a substance within the group may be predicted from data for reference substance(s) within the group (addressed under 'Assessment of prediction(s)').

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

A. Scope of the grouping

1. Description of the grouping

In your registration dossier you have formed a group (category) of 'Aromatic sulphonic salts'. You have not provided any justification for the predictions of the toxicological properties listed above.

For the purpose of this decision, the following substance names are used regarding the group members:

[1] sodium 4-methylbenzenesulfonate, (also known as sodium toluene-4-sulphonate) (EC number 211-522-5)
[2] sodium cumene sulphonate (EC number 248-983-7)
[3] calcium xylenesulphonate (EC number 248-829-9)
[4] sodium xylene sulphonate (EC number 215-090-9)
[5] p-toluene sulphonic acid (EC number 203-180-0)
[6] benzenesulfonic acid (EC number 202-638-7)
[7] hydroxybenzene sulfonic acid (EC number 202-691-6)

You have not provided any reasoning for the grouping of the substances.

2. Assessment of the grouping

ECHA notes the following shortcomings with regards to your grouping approach:

i. Applicability domain of the category

A category (grouping) hypothesis must address "*the set of inclusion and/or exclusion rules that identify the ranges of values within which reliable estimations can be made for category members for the given endpoint*" (ECHA Guidance R.6.2.4.1). Particularly, "*the applicability domain of a (sub)category would identify the structural requirements and ranges of physico-chemical, environmental fate, toxicological or ecotoxicological properties within which reliable estimations can be made for the (sub)category members*" (ECHA Guidance R.6.2.1.2). Therefore, to reliably predict properties within a category the applicability domain must be described including the borders of the category, for which chemicals the category does not hold and a justification for the inclusion and/or exclusion rules.

You have not provided a description of the applicability domain of the substances covered by the category approach.

As you have not provided unambiguous inclusion/exclusion criteria it is not possible to identify the structural requirements and ranges of physico-chemical, environmental fate, toxicological and/or ecotoxicological properties within which you consider that reliable estimations can be made for the category members.

ii. Characterisation of the group members

Annex XI, Section 1.5 of REACH provides that "*substances whose physicochemical, toxicological and ecotoxicological properties are likely to be similar or follow a regular pattern as a result of structural similarity may be considered as group*". ECHA Guidance clarifies that "*in identifying a category, it is important that all potential category members are described as comprehensively as possible*", because the purity profile and composition can influence the overall toxicity/properties of the potential category members (ECHA Guidance R.6.2.4.1). Therefore, qualitative and quantitative information on the compositions of the category members must be provided to confirm the category membership.

As already explained above, you have not defined the applicability domain of the category. Further, you have not provided compositional information for the members of your category including a comprehensive description of their purity profile and of the presence of impurities.

Without the compositional information for the category members (and a definition of the applicability domain of the category), the category membership cannot be evaluated.

B. Predictions for toxicological and ecotoxicological properties

You have not provided any specific reasoning for the prediction of the toxicological and ecotoxicological properties listed above.

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

You intend to predict the properties for the category members from information obtained from the following source substances:

In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.):
- p-toluene sulphonic acid (EC number 203-180-0)
- benzenesulfonic acid (EC number 202-638-7)

Short-term toxicity testing on aquatic invertebrates (Annex VII, Section 9.1.1.):
- p-toluene sulphonic acid (EC number 203-180-0)
- benzenesulfonic acid (EC number 202-638-7)

Short-term toxicity testing on fish (Annex VIII, Section 9.1.3.):
- p-toluene sulphonic acid (EC number 203-180-0)

In vitro cytogenicity study in mammalian cells or in vitro micronucleus study (Annex VIII, Section 8.4.2.):
- p-toluene sulphonic acid (EC number 203-180-0)

In vivo cytogenicity study in mammalian cells (Annex VIII, Section 8.4.2., Column 2):
- sodium cumene sulphonate (EC number 248-983-7)
- calcium xylenesulphonate (EC number 248-829-9)

Short-term repeated dose toxicity (28 days; Annex VIII, Section 8.6.1.):
- p-toluene sulphonic acid (EC number 203-180-0)
- sodium xylene sulphonate (EC number 215-090-9)

Growth inhibition study aquatic plants (Annex VII, Section 9.1.2.):
- benzenesulfonic acid (EC number 202-638-7)
- sodium toluene-4-sulphonate (EC number 211-522-5)
- calcium xylenesulphonate (EC number 248-829-9)
- sodium xylene sulphonate (EC number 215-090-9)

Sub-chronic toxicity study (90-day) (Annex IX, Section 8.6.2.):
- sodium xylene sulphonate (EC number 215-090-9)

ECHA notes the following shortcomings with regards to predictions of toxicological and ecotoxicological properties.

1. Supporting information

Annex XI, Section 1.5 of the REACH Regulation states that "*physicochemical properties, human health effects and environmental effects or environmental fate may be predicted from data for reference substance(s)*". For this purpose, "*it is important to provide supporting information to strengthen the rationale for the read-across*" (ECHA Guidance R.6.2.2.1.f). The set of supporting information should allow to verify the crucial aspects of the read-across hypothesis and establish that the properties of the Substance can be predicted from the data on other category members.

As indicated above, your read-across hypothesis is based on the assumption that the structurally similar category members cause the same type of effects. In this context, supporting information must include bridging studies of comparable design and duration for the category members and the Substance.

The data set reported in the technical dossier does not include any bridging studies to support your read-across hypothesis.

In the absence of such information, you have not established that the category members are likely to have similar properties. Therefore, you have not provided sufficient supporting information to strengthen the rationale for the read-across. This issue equally applies to predictions of toxicological properties, aquatic toxicity and environmental fate properties.

2. Data density

Annex XI, Section 1.5. provides that "*substances whose physicochemical, toxicological and eco-toxicological properties are likely to be similar or follow a regular pattern as result of structural similarity may be considered as a group or 'category' of substances".* ECHA Guidance R.6.2.1.5 clarifies that one of the factors in determining the robustness of a category is the density and distribution of the available data across the category. To identify a regular pattern and/or to derive reliable prediction of the properties of the members of the category, adequate and reliable information covering the range of structural variations identified among the category members must be available.

For each toxicological property, you have provided some information on a single or only few category members. Furthermore, as explained under "Adequacy and reliability of source studies" (see issue 3 below), We have identified a number of shortcomings with some of the studies you provided on the selected category members.

Therefore, the information provided is not sufficient to conclude that toxicological properties are likely to be similar within the category.

3. Adequacy and reliability of source studies

Under Annex XI, Section 1.5., if grouping concept is applied then in all cases, the results must:

- 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.

We have identified a number of shortcomings with some of the studies you provided on the selected category members. These deficiencies are addressed under the corresponding information requirements in Appendices A to C.

C. Conclusions on the grouping of substances and read-across approach

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

In your comments on the draft decision, you acknowledged the deficiencies identified above.

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

1. In vitro gene mutation study in bacteria

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

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. an *in vitro* gene mutation study in bacteria (OECD TG 471, key study) on p-toluene sulfonic acid (EC number 203-180-0) ([redacted], 1988);
2. a publication reporting information on *in vitro* gene mutation in bacteria on benzenesulfonic acid (EC number 202-638-7) ([redacted] 1998).

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under the appendix on 'Reasons common to several requests', your read-across adaptations under Annex XI, Section 1.5. are rejected as you have not established that relevant properties of the Substance can be predicted using data on the members of the 'Aromatic sulphonic acids and salts' category.

B. *The studies provided are also not in line with the requirements in OECD TG 471 (1997)*

To fulfil the information requirement, the study has to meet the requirements of OECD TG 471[2] (1997). Some of the key specifications of this test guideline include:

a) the test must be performed with 5 strains: four strains of *S. typhimurium* (TA98; TA100; TA1535; TA1537 or TA97a or TA97) and one strain which is either *S. typhimurium* TA102 or *E. coli* WP2 uvrA or *E. coli* WP2 uvrA (pKM101);
b) the number of revertant colonies per plate for the concurrent negative control must be inside the historical control range of the laboratory;
c) the mean number of revertant colonies per plate must be reported for the treated doses and the controls.

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

a) the results for the required fifth strain, *S. typhimurium* TA102 or *E. coli* WP2 uvrA or *E. coli* WP2 uvrA (pKM101);
b) reporting on the negative control with a number of revertant colonies per plate demonstrating it is inside the historical control range of the laboratory;
c) reporting on the number of revertant colonies per plate for the treated doses and the controls.

Therefore, none of the studies listed above meets the information requirement.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study according to OECD TG 471 on the Substance.

2. Short-term toxicity testing on aquatic invertebrates

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

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

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. a short-term toxicity study on aquatic invertebrates according to OECD TG 202 with benzenesulfonic acid (EC number 202-638-7) ([redacted], 2005);
2. a short-term toxicity study on aquatic invertebrates according to OECD TG 202 with p-toluene sulphonic acid (EC number 203-180-0) ([redacted] 2010);
3. a short-term toxicity study on aquatic invertebrates according to OECD TG 202 with benzenesulfonic acid (EC number 202-638-7) ([redacted], 1995).

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under the appendix on 'Reasons common to several requests', your read-across adaptations under Annex XI, Section 1.5. are rejected as you have not established that relevant properties of the Substance can be predicted using data on the members of the 'Aromatic sulphonic acids and salts' category.

B. *The source of information 2. has low reliability:*

To inform on short-term toxicity on aquatic invertebrates, a study must provide equivalent information to study described in the OECD TG 202 test method. Therefore, the following key specifications are normally expected to be met:

Technical specifications impacting the sensitivity/reliability of the test

- the test duration is 48 hours or longer. However, in study 2., the exposure duration was only 24 hours;

Characterisation of exposure

- the concentrations of the test material are measured at least at the highest and lowest test concentration, at the beginning and end of the test. However, in study 2., no analytical monitoring of exposure was conducted.

Therefore, this study does not meet the information requirement.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study on the Substance.

3. Growth inhibition study aquatic plants

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

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. a growth inhibition study on algae according to EPA OTS 797.1050 with sodium xylene sulphonate (EC number 215-090-9) ([redacted], 1993)
2. a growth inhibition study on algae according to EU Method C.3 with sodium toluene-4-

sulphonate (EC number 211-522-5) ([redacted], 1995)
3. a growth inhibition study on algae according to EPA OTS 797.1050 with calcium xylenesulphonate (EC number 248-829-9) ([redacted], 1994)
4. a growth inhibition study on algae according to OECD TG 201 with benzenesulfonic acid (EC number 202-638-7) ([redacted] 2005)

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under the appendix on 'Reasons common to several requests', your read-across adaptations under Annex XI, Section 1.5. are rejected as you have not established that relevant properties of the Substance can be predicted using data on the members of the 'Aromatic sulphonic acids and salts' category.

B. *The identity of the test material in studies 1. to 3. is unclear*

For studies 1. to 3., you report that the purity of the test material ranged from 31.2% to 42.8% depending on the study. You have not provided further information, including composition and presence of impurities in the corresponding test materials.

In the absence of composition information, the identity, composition and presence of impurities of the test material cannot be assessed. Therefore, the information provided is rejected.

C. *The sources of information 1., 3. and 4. have low reliability:*

To inform on growth inhibition on algae, a study must provide equivalent information to study described in the OECD TG 201 test method. Therefore, the following key specifications are normally expected to be met:

Validity criteria and reporting of the methodology and results
- exponential growth in the control cultures is observed over the entire duration of the test;
- at least 16-fold increase in biomass is observed in the control cultures by the end of the test;
- the mean coefficient of variation for section-by-section specific growth rates (days 0-1, 1-2 and 2-3, for 72-hour tests) in the control cultures is ≤ 35%;
- the coefficient of variation of average specific growth rates during the whole test period in replicate control cultures is ≤ 7%.
- the results of algal biomass determined in each flask at least daily during the test period are reported in a tabular form.

For studies 1., 3. and 4., tabulated data on the algal biomass determined daily for each treatment group and control are not reported. Therefore, it is not possible to verify whether validity criteria consistent with the requirements of OECD TG 201 were met for these studies.

Characterisation of exposure
- the concentrations of the test material are measured at least at the beginning and end of the test:
  1) at the highest, and
  2) at the lowest test concentration, and
  3) at a concentration around the expected EC_{50}.

However, for study 1, you reported that no analytical monitoring of exposure was conducted. In the absence of this information, you have not demonstrated that exposure was satisfactorily maintained over the duration of the test and that effect concentrations can be reliably expressed based on nominal concentrations.

Therefore, these studies do not meet the information requirement.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study on the Substance.

4. Ready biodegradability

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

You have provided an adaptation under Annex XI, Section 1.2. (weight of evidence) supported by the following sources of information:

1. a ready biodegradability study according to OECD TG 301D with sodium cumene sulfonate (EC number 248-983-7) ([redacted], 1995);
2. a ready biodegradability study according to OECD TG 301D sodium xylene sulphonate (EC number 215-090-9) ([redacted] 1995);
3. a ready biodegradability study according to OECD TG 301D with benzenesulfonic acid (EC number 202-638-7) ([redacted] 1995);
4. a ready biodegradability study according to OECD TG 301B with calcium xylenesulphonate (EC number 248-829-9) ([redacted], 1994);
5. a ready biodegradability study according to OECD TG 301B with sodium cumene sulfonate (EC number 248-983-7) ([redacted] 1993);
6. a ready biodegradability study according to OECD TG 301B with p-toluene sulphonate (EC number 211-522-5) ([redacted], 2004);
7. a ready biodegradability study according to OECD TG 301B with sodium xylene sulphonate (EC number 215-090-9) ([redacted], 1993);
8. a ready biodegradability study according to OECD TG 301B with sodium xylene sulphonate (EC number 215-090-9) ([redacted], 1993);
9. a published non guideline biodegradation study with p-toluene sulphonic acid (EC number 203-180-0) (Bayer, 1991);
10. a published study similar to EU Method C.6 with benzenesulfonic acid (EC number 202-638-7) (Pitter, 1976);
11. a published study similar to EU Method C.6 with p-toluene sulphonic acid (EC number 203-180-0) (Pitter, 1976);
12. a published non guideline biodegradation study with p-toluene sulphonic acid (EC number 203-180-0) (Matsui *et al.*, 1988);
13. a published non guideline biodegradation study with benzenesulfonic acid (EC number 202-638-7) (Kuhn & Suflita, 1989);
14. a published non guideline biodegradation study with benzenesulfonic acid (EC number 202-638-7) (Kawasaki, 1980);
15. a published non guideline biodegradation study with benzenesulfonic acid (EC number 202-638-7) (Kawahara *et al.*, 1999);
16. a published non guideline biodegradation study similar to OECD TG 302C with hydroxybenzenesulfonic acid (EC 202-691-6) (Malaney & McKinney, 1966).

We have assessed this information and identified the following issue:

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

According to ECHA Guidance R.4.4, a weight of evidence adaptation involves an assessment of the relative values/weights of different sources of information submitted. The weight given is based on the reliability of the data, consistency of results/data, nature and severity of effects, and relevance of the information for the given regulatory information requirement. Subsequently, relevance, reliability, consistency and results of these sources of information must be balanced in order to decide whether they together provide sufficient weight to conclude that the Substance has or has not the dangerous property investigated by the required study.

To fulfil the information requirement on ready biodegradability, normally a study performed according to OECD TG 301 or 310 must be provided. OECD TG 301 or 310 investigate the following: the ultimate aerobic biodegradation (as measured by parameters such as DOC removal, CO_2 production and oxygen uptake) of the test material under low inoculum concentration (with a non-adapted inoculum representing a mixed bacterial community) and measured at sufficiently frequent intervals to allow the identification of the beginning and end of biodegradation.

For the sources of information 10. and 11., you stated that "*The concentration of test compound was gradually increased to 200 mg/L as COD after 20 days*" prior to monitoring degradation over a 120-hour period. Therefore, the inoculum is considered to be adapted to the corresponding test material and these sources of information do not provide the information normally investigated by a study performed according to OECD TG 301 or 310.

Study 12 was conducted using an adapted inoculum from an industrial STP and therefore does not provide the information normally investigated by a study performed according to OECD TG 301 or 310.

Studies 13, 14 and 15 monitored the disappearance of the parent substance and therefore does not provide information on ultimate aerobic biodegradation.

Study 16 was conducted with an adapted inoculum at high inoculum concentration (i.e. 5 g/L), therefore it does not provide information on biodegradation under low inoculum concentration with a non-adapted inoculum.

Therefore, only sources of information 1. to 9. provide the information normally investigated by a study performed according to OECD TG 301 or 310.

While sources of information 1. to 9. provide relevant information, the reliability of these sources of information is significantly affected by the following deficiencies:

A. Rejected read-across adaptations

The sub-section 1 of the appendix on 'Reasons common to several requests' detail deficiencies with your category approach for 'Aromatic sulphonic acids and salts'. These findings apply equally to the sources of information relating to analogue substances submitted under your weight of evidence adaptation.

You have not provided any specific reasoning for the prediction of ready biodegradability.

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

You intend to predict the properties for the category members from information obtained from the following source substances:

- sodium cumene sulfonate (EC number 248-983-7)
- sodium xylene sulphonate (EC number 215-090-9)
- benzenesulfonic acid (EC number 202-638-7)
- calcium xylenesulphonate (EC number 248-829-9)
- sodium cumene sulfonate (EC number 248-983-7)
- p-toluene sulphonate (EC number 211-522-5)
- sodium xylene sulphonate (EC number 215-090-9)
- p-toluene sulphonic acid (EC number 203-180-0)
- benzenesulfonic acid (EC number 202-638-7)
- hydroxybenzenesulfonic acid (EC 202-691-6)

ECHA Guidance R.6.2.2.1.f indicates that "*it is important to provide supporting information to strengthen the rationale for the read-across*". The set of supporting information should allow to verify the crucial aspects of the read-across hypothesis and establish that the properties of the Substance can be predicted from the data on category members. The observation of differences in the environmental fate properties between the source substances and the Substance would contradict the hypothesis that the properties of the Substance can be predicted from the data on the similar substances. An explanation why such differences do not affect the read-across hypothesis needs to be provided and supported by scientific evidence.

Without considerations of the shortcomings in the studies provided on the category members (See issues B. and C. below), the studies provided on sodium cumene sulphonate (EC number 248-983-7; Study 1.), sodium xylene sulphonate (EC number 215-090-9: Study 2) and benzenesulfonic acid (EC number 202-638-7; Study 3.) shows that biodegradation did not reach 60% biodegradation by the end of the test (i.e. 28 days). The study on calcium xylene sulphonate (EC number 248-829-9; Study 4.) indicates that these substance did not meet the 10-d window criteria. Finally, for a number of other studies, the 10d-window criteria cannot be verified.

The available set of data on the category members indicates differences in their environmental fate properties. This contradicts your read-across hypothesis whereby the structurally similar category members have similar properties. Therefore, you have not demonstrated and justified that the properties of the category members are likely to be similar despite the observation of these differences.

On the basis of the above, you have not established that relevant properties of the Substance can be predicted using either data on the members of the 'Aromatic sulphonic acids and salts' category. Therefore, the reliability of such information in support of your weight of evidence adaptation under Annex XI, Section 1.2 is considered low.

B. The identity of the test material in studies 1. to 3. is unclear

For studies 1., 4., 5. and 8., you report that the purity of the test material ranges from 31.2% to 45%, respectively without further information, including composition and presence of impurities. For studies 2, 7 and 9, you have not provided identification information of the test

material (i.e. CAS and/or EC numbers) and no information on composition.

In the absence of composition information, the identity, composition and presence of impurities of the test material cannot be assessed. Therefore, the information provided is rejected.

C. The sources of information 1. and 3. have low reliability:

To inform on ready biodegradability, a study must provide equivalent information to a ready biodegradability study described in any of the OECD TG 301 or 310 test methods. Therefore, for a study claimed to be conducted according to OECD TG 301, the following key specifications are normally expected to be met:

Validity criteria and reporting

- The difference of extremes of replicate values of the removal of the test material at the plateau, at the end of the test or, if appropriate, at the end of the 10-d window is ≤ 20%.
- For a study according to OECD TG 301B, the inorganic carbon content (IC) of the test material suspension in the mineral medium at the beginning of the test is < 5% of the total carbon (TC);
- For a study according to OECD TG 301D, the oxygen depletion in the inoculum blank is ≤ 1.5 mg dissolved O_2/L after 28 days and the residual concentration of oxygen in the test bottles is ≥ 0.5 mg O_2/L at any time;
- The results of measurements at each sampling point in each replicate is reported in a tabular form;

  You have not reported the results of measurements at each sampling point in each replicate is reported in a tabular form for any of the studies. Therefore, it is not possible to verify whether or not validity criteria consistent with the corresponding test guideline were met.

Technical specifications impacting the sensitivity/reliability of the test

- The inoculum is not be pre-adapted to the test material;

  For studies 1., 2., 4., 5., 7., 8., and 9., you report that it is not specified if the inoculum was adapted to the test material.

- For a study according to OECD TG 301B, the concentration of the inoculum is set to reach a bacterial cell density of 10^7 to 10^8 cells/L in the test vessel. For a study according to OECD TG 301D, the concentration of the inoculum is set to reach a bacterial cell density of 10^4 to 10^6 cells/L in the test vessel;

  However, no information is provided on the concentration of the inoculum at the beginning of the test in cells/L for studies 1., 2., 3., 5., 7., 8., and 9. Therefore, it is not possible to evaluate if the inoculum density at the start of the study was within an acceptable range. For study 4., your report that the initial inoculum density was *"5.2 x 10-7 colony forming units / mL"* which is three orders of magnitudes higher than the specifications of OECD TG 301B.

Reporting of the methodology

- For a study according to OECD TG 301B and 301D, the calculation of the $ThCO_2$ and ThOD, respectively, is described and justified;

  However, this information is not provided for studies 1., 2., and 4. to 9.

Due to these significant deficiencies, the sources of information 1. to 9. do not provide an adequate and reliable coverage of the key parameter addressed in OECD TG 301B or 301D. Therefore, the reliability of such information in support of your weight of evidence adaptation under Annex XI, Section 1.2 is considered low.

Conclusion on your weight of evidence adaptation:

Taken together, even if these sources of information provide information on ready biodegradability, their reliability is affected so significantly that they cannot be taken into consideration in a weight of evidence approach.

Therefore, it is not possible to conclude, based on any source of information alone or considered together, whether your Substance has or has not the particular dangerous property foreseen to be investigated in a ready biodegradability study according to OECD TG 301 or 310. Therefore, your adaptation is rejected.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study on the Substance.

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

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

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

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. an *in vitro* mammalian Chromosome Aberration test (OECD TG 473) on p-toluene sulfonic acid (EC number 203-180-0) in Chinese hamster lung fibroblasts (V79) ([redacted], 1988).

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under Section 1 of the appendix on 'Reasons common to several requests', your read-across adaptations under Annex XI, Section 1.5. for the 'Aromatic sulphonic acids and salts' category is rejected.

B. *Study 1. is also not in line with the requirements in OECD TG 473*

To fulfil the information requirement, the study has to be an *in vitro* chromosomal aberration test or an *in vitro* micronucleus test, conducted in mammalian cells in accordance with OECD TG 473 or OECD TG 487, respectively[3]. The key specifications of these test guidelines include:

a) at least 300 well-spread metaphases must be scored per concentration;
b) the response for the concurrent negative control must be inside the historical control range of the laboratory;
c) data on the cytotoxicity and the frequency of cells with structural chromosomal aberration(s) for the treated and control cultures must be reported.

The reported data for the studies did not include:

a) the scoring of at least 300 metaphases per concentration is not reported.
b) reporting on whether the negative control's response is inside the historical control range of the laboratory.
c) reporting on the cytotoxicity and/or the frequency of cells with structural chromosomal aberration(s) for the treated and control cultures.

Therefore, the study listed above does not meet the information requirement.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study according to OECD TG 473 or 487 on the Substance.

2. In vitro gene mutation study in mammalian cells

An *in vitro* gene mutation study in mammalian cells is an information requirement under Annex VIII to REACH (Section 8.4.3.) in case of a negative result in the in vitro gene mutation test in bacteria and the in vitro cytogenicity test.

[3] ECHA Guidance R.7a, Table R.7.7-2, p.557

i. Triggering of the study

Your dossier contains read-across adaptations for *in vitro* gene mutation study in bacteria, and *in vitro* cytogenicity study in mammalian cells or in vitro micronucleus study.

However, the information for the *in vitro* gene mutation study in bacteria and for the *in vitro* cytogenicity study in mammalian cells (or *in vitro* micronucleus study) provided in the dossier are rejected for the reasons provided in appendices A.1. and B.1. above.

The result of the requests for information in appendices A.1. and B.1. above will determine whether the present requirement for an *in vitro* mammalian cell gene mutation study in accordance with Annex VIII, Section 8.4.3 is triggered.

ii. Assessment of information provided

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. *in vivo* micronucleus cytogenicity assay in mice according to OECD TG 474 on sodium cumene sulphonate (EC number 248-983-7) ([redacted], 1992);
2. *in vivo* micronucleus cytogenicity assay in mice according to EPA OTS 798.5385 on calcium xylene sulphonate (EC number 248-829-9) ([redacted], 1994).

We have assessed this information and identified the following issues:

A. Rejected read-across adaptations

As explained under Section 1 of the appendix on 'Reasons common to several requests', your read-across adaptation under Annex XI, Section 1.5. for the category approach for 'Aromatic sulphonic acids and salts' is rejected.

B. OECD study/ies other than in vitro gene mutation study in mammalian cells

To fulfil the information requirement, a study must be an *in vitro* gene mutation study in mammalian cells and comply with the OECD TG 476 or 490 (Article 13(3) of REACH and ECHA Guidance R.7, Table R.7.7-2).

Studies 1. and 2. are not an *in vitro* gene mutation study in mammalian cells. Therefore, the information provided does not cover the key parameters required by the OECD TG 476 or 490.

In your comments on the draft decision, you agreed that the requested study is necessary only if the results of the OECD TG 471 and 473/487 are negative. Moreover, you stated that in such case you will use information on analogue substances and that you will provide this information in an update of your registration dossier. ECHA takes note of your intention potentiallyadapt your read-across hypothesis and your read-across adaptations. However, the information you provided in your comments is not sufficient for ECHA to make an assessment.

On this basis, the information requirement is not fulfilled.

3. Justification for an adaptation of a Short-term repeated dose toxicity (28 days) based on the results of the Sub-chronic toxicity study (90 days)

A Short-term repeated dose toxicity study (28 days) is an information requirement under

Annex VIII to REACH (Section 8.6.1.). This information may take the form of a study record or a valid adaptation in accordance with either a specific adaptation rule under Column 2 of Annex VIII or a general adaptation rule under Annex XI.

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. a short-term (28-day) repeated-dose toxicity oral (supporting) study in male and female rats (OECD TG 407) performed with p-toluenesulphonic acid (EC number 203-180-0) (reliability 2, 1990).
2. two dose-range finding (supporting) studies (14-day repeated dose) in mice and rats performed with sodium xylene sulphonate (EC number 215-090-9) (reliability 2, 1979);
3. a dose-range finding (supporting) study (14-day repeated dose) in male and female rats performed with sodium xylene sulphonate (EC number 215-090-9) (reliability 2, 1980);

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under Section 1 of the appendix on 'Reasons common to several requests', your read-across adaptation under Annex XI, Section 1.5. for the category approach for 'Aromatic sulphonic acids and salts' is rejected.

B. *The studies are also not in line with the requirements in OECD TG 407*

To be considered compliant and enable concluding whether the Substance has dangerous properties and supports the determination of the No-Observed Adverse Effect Level (NOAEL), a study must meet the requirements of OECD TG 407. The key parameter(s) of this test guideline include:

a) dosing of the Substance daily for a period of 28 days until the scheduled termination of the study;
b) highest dose level should aim to induce some systemic toxicity, but not death or severe suffering;
c) examination of the animals for weight and histopathology (including thyroid gland/ thyroid hormone measurements).

a) The 3 dose-range finding studies (2. and 3. above) you have provided do not have the required exposure duration of 28 days as required in OECD TG 407, because you indicated an exposure duration of 14 days.
b) The highest dose level in study 1. did not induce any systemic toxicity. Therefore, the dose level selection was too low, and the study does not fulfil the criterion set in OECD TG 407.
c) None of the studies you have provided were performed according to the criteria of the OECD TG 407, since the following key parameters are missing: haematology, clinical chemistry or thyroid hormone measurements.

Therefore, none of these studies meet the information requirement.

C. *No reliable information on sub-chronic toxicity is available in your dossier*

Your dossier also includes information on sub-chronic toxicity (90 days). However, for the reasons explained under Section C.1., this information does not meet the

information requirement of Annex IX, Section 8.6.2. and cannot be used to omit this information requirement in accordance with Column 2 of Annex VIII, Section 8.6.1.

On this basis, the information requirement is not fulfilled.

Study design

Column 2 of Annex VIII, Section 8.6.1. provides that an experimental study for this endpoint is not needed if a reliable sub-chronic (90 days) or chronic toxicity study is available.

The present decision requests the registrants concerned to generate and submit a reliable sub-chronic toxicity study (90 days) (see Section C.1). According to Column 2 of Annex VIII, Section 8.6.1., and to prevent unnecessary animal testing, a short-term toxicity study (28 days) does not therefore need to be conducted.

Because you still must comply with the information requirement in Annex VIII, Section 8.6.1., you are requested to submit a justification for the adaptation provided in Column 2 of that provision.

We take note of your comments on the draft decision that you intend to provide a justification for the adaptation provided in Column 2 considering also the data to be provided on sub-chronic toxicity.

4. Screening for reproductive/developmental toxicity

A Screening for reproductive/developmental toxicity study (test method: EU B.63/OECD TG 421 or EU B.64/OECD TG 422) is an information requirement under Annex VIII to REACH (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. There is no information available in your dossier indicating that your Substance may be a developmental toxicant.

You have omitted this information and you provided the following justification: "*Studies from the hydrotropes category are reported as read across for this endpoint. Hydrotropes are the salt form of the sulphonic acids. The 90-day oral rat and oral mouse studies and the 2-year chronic dermal rat and mouse studies included examination of sex organs of both sexes. No treatment related effects were observed on reproductive organs.*"

We have assessed this information and identified the following issues:

A. *Absence of legal basis for your adaptation*

A registrant may only adapt this information requirement based on the general rules set out in Annex VIII, Section 8.7.1., Column 2 or in Annex XI.

Your justification to omit this information does not refer to any legal ground for adaptation under Annex VIII, Section 8.7.1., Column 2 or Annex XI to REACH.

Therefore, you have not demonstrated that this information can be omitted.

B. *Rejected read-across adaptations*

Furthermore, as explained under Section 1 of the appendix on 'Reasons common to several requests', your read-across adaptation under Annex XI, Section 1.5. regarding the repeated dose toxicity studies is rejected, as you have not established that relevant

properties of the Substance can be predicted using either the analogue sodium sulphate or any other members of the category.

In your comments on the draft decision, you stated that the study does not need to be conducted if a pre-natal developmental toxicity study (OECD TG 414) is available. Since there is no compliant OECD TG 414, (and no OECD TG 443 nor 416) study available you stated that you will consider other OECD 414 data on analogue substances.

ECHA considers that, in the absence of an adequate pre-natal developmental toxicity study, your justification to omit this information requirement is rejected.

On this basis, the information requirement is not fulfilled.

Study design

As the information requirement for the short-term toxicity is not fulfilled, and to avoid unnecessary animal testing, you must provide a study according to the test method EU B.64/OECD TG 422, which must be performed in rats with oral[4] administration of the Substance.

5. Short-term toxicity testing on fish

Short-term toxicity testing on fish is an information requirement under Annex VIII to REACH (Section 9.1.3.).

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. a short-term toxicity study on fish similar to OECD TG 203 with p-toluene sulphonic acid (EC number 203-180-0) ([redacted], 1981);

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under the appendix on 'Reasons common to several requests', your read-across adaptations under Annex XI, Section 1.5. are rejected as you have not established that relevant properties of the Substance can be predicted using data on the members of the 'Aromatic sulphonic acids and salts' category.

B. *The identity of the test material in study 1. is unclear*

For study 1. above, you report that the purity of the test material was 65%. You have not provided further information, including composition and presence of impurities.

In the absence of composition information, the identity, composition and presence of impurities of the test material cannot be assessed. Therefore, the information provided is rejected.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study on the Substance.

[4] ECHA Guidance R.7a, Section R.7.6.2.3.2.

6. Adsorption/ desorption screening

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

You have provided the following information:

1. an adaptation under Section 9.3.1., column 2 of Annex VIII with the following justification:
   - *"the substance has a very low log Pow and therefore is likely to have a very low potential for absorption";*
   - *"the substance is readily biodegradable".*

We have assessed this information and identified the following issues:

A. Under Section 9.3.1., column 2 of Annex VIII, the study may be omitted if based on the physicochemical properties the substance can be expected to have a low potential for adsorption (e.g. the substance has a low octanol water partition coefficient). To adapt this information requirement based on low Log Kow only, lipophilicity must be the sole characteristic driving the adsorption potential of a substance. However, for some groups of substances (e.g. ionisable substances, surfactants) mechanisms other than lipophilicity may drive adsorption.

   You have justified the low potential for adsorption because the partition coefficient value (log Kow) was determined to be -0.12 at pH 2.5. You consider that the Substance is fully dissociated in water.

   While anionic substances may be expected to have lower tendency to sorb compared to cationic substances, ionic binding to positively charged soil constituents (e.g. hydrous oxides of aluminium and iron) cannot be excluded. Therefore, log Kow is not a valid descriptor for assessing the adsorption potential of the Substance and your adaptation is rejected.

B. Under, Section 9.3.1., column 2 of Annex VIII, the study may be omitted if the substance is readily biodegradable.

   For the reasons explained under Section A.4., the information requirement on ready biodegradability is not fulfilled. Therefore, you have not demonstrated that the substance is readily biodegradable, and your adaptation is rejected.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you agreed to conduct the study on the Substance. We take note of your intention to consider adapting this information requirement under Section 9.3.1., column 2, second indent of Annex VIII.

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

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

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

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. A sub-chronic (90-day) toxicity study in rats (OECD TG 408, reliability 2) performed with sodium xylene sulphonate (EC number 215-090-9) ([redacted] 1969);
2. A non guideline sub-chronic (90-day) toxicity study in male and female mice performed with sodium xylene sulphonate (EC number 215-090-9) ([redacted] 1980);

We have assessed this information and identified the following issues:

A. *Rejected read-across adaptations*

As explained under Section 1 of the appendix on 'Reasons common to several requests', your read-across adaptation under Annex XI, Section 1.5. for the category approach for 'Aromatic sulphonic acids and salts' is rejected.

B. *The studies are also not in line with the requirements in OECD TG 408*

To be considered compliant and enable concluding whether the Substance has dangerous properties and supports the determination of the No-Observed Adverse Effect Level (NOAEL), a study must meet the requirements of the OECD TG 408. The key parameter(s) of this test guideline include the reporting of clinical observations, ophthalmological examination, sensory reactivity to various stimuli and functional observations of the animals, recording of body weight, haematology, clinical biochemistry, and pathology of sexual (male and female) organs, full detailed gross necropsy and subsequent histopathology of both types tissues.

The studies you have provided were not performed according to the criteria of the OECD TG 408, since the following parameters are missing:

- Ophthalmological findings/ not examined (for study 1.)
- Haematological findings/ not examined (for study 1)
- Clinical biochemistry findings/ not examined (for study 1.)
- Urinalysis findings/ not examined (for study 1.)
- Behaviour (functional findings)/ not examined (for both studies)

In your comments on the draft decision, you agreed that the source studies you provided in your registration dossier are not adequate to fulfil the information requirement. However, you disagreed to conduct a study on the Substance. ECHA takes note of your intention to rather rely on studies on the individual components of the multi-constituent substance, and to adapt your read-across hypothesis and your read-across adaptations.

However, based on the above and on the information currently available, the information requirement is not fulfilled.

Study design

Referring to the criteria provided in Annex IX, Section 8.6.2, Column 2, the oral route is the most appropriate route of administration to investigate repeated dose toxicity, when the Substance is a highly soluble solid substance.

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

2. Pre-natal developmental toxicity study in one species

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

You have adapted this information requirement under Annex XI, Section 1.5 (read-across). In support of your adaptation, you have provided the following information:

1. A developmental Toxicity (key) Study in Rats (no test guideline, 1994) performed with calcium xylene sulphonate (EC number 248-829-9).

We have assessed this information and identified the following issues:

A. Rejected read-across adaptations

You have not provided any reasoning for the prediction of toxicological properties

You read across between the structurally similar substance, calcium xylene sulphonate (EC number 248-829-9) as source substance and the Substance as target substance. ECHA understands that you predict the properties of the Substance using a read-across hypothesis which assumes that different compounds have the same type of effects. The properties of your Substance are predicted to be quantitatively equal to those of the source substance.

ECHA notes the following issues:

Absence of read-across documentation
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 a justification for the read-across including a hypothesis, explanation of the rationale for the prediction of properties and robust study summary(ies) of the source study(ies) (ECHA Guidance R.6.2.6.1).

You have provided a study conducted with calcium xylene sulphonate in order to comply with your information requirements. However, you have not provided documentation as to why this information is relevant for your Substance.

In the absence of such documentation, ECHA cannot verify that the properties of your Substance can be predicted from the data on the source substance.

Supporting information
Annex XI, Section 1.5 of the REACH Regulation states that "*[...] human health effects [...] may be predicted from data for reference substance(s)*". For this purpose "*it is important to provide supporting information to strengthen the rationale for the read-across*" (ECHA Guidance R.6.2.2.1.f).The set of supporting information should allow to verify the crucial aspects of the read-across hypothesis and establish that the properties of the Substance can be predicted from the data on the source substance.

In this context, supporting information must include relevant and reliable information on the properties of the non-common constituents of the analogue and registered substances. The impact of exposure to these non-common compounds on the

prediction of properties of the Substance needs to be assessed to ensure that a reliable prediction can be made.

In the absence of such information, 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. Therefore, you have not provided sufficient supporting information to strengthen the rationale for the read-across.

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

B. The studies are also not in line with the requirements in OECD TG 414

To fulfil the information requirement, a study must comply with the OECD TG 414. The criteria of this test guideline include:

- highest dose level should aim to induce some developmental and/or maternal toxicity;
- examination of the dams for weight and histopathology of the thyroid gland/thyroid hormone measurements/gravid uterus weight/uterine content/body weight of the dams/clinical signs of the dams;
- examination of the foetuses for sex and body weight/external, skeletal and soft tissue alterations (variations and malformations)/number of resorptions and or live foetuses/ measurement of anogenital distance in live rodent foetuses.

- the highest dose level did not induce any developmental and/or maternal toxicity and you have not shown that the aim was to induce toxicity. Therefore, the dose level selection was too low;
- you have not reported whether the weight and histopathology of the thyroid gland, the thyroid hormone measurements have been conducted in dams, and whether the gravid uterus weight have been examined or measured as required in OECD TG 414;
- you have not reported whether the sex and body weight of the foetuses, external, skeletal and soft tissue alterations (variations and malformations) have been examined as required in OECD TG 414.

In your comments on the draft decision, you agreed that the study you provided in your registration dossier is not in line with the requirements of OECD TG 414. ECHA also takes note of your intention to rather rely on studies on the individual components of the multi-constituent substance, and to adapt your read-across hypothesis and your read-across adaptations.

However, On the basis of the above and the information currently available, the information requirement is not fulfilled.

Study design

A PNDT study according to the test method OECD TG 414 must be performed in rat or rabbit as preferred species with oral[5] administration of the Substance.

3. Long-term toxicity testing on aquatic invertebrates

[5] ECHA Guidance R.7a, Section R.7.6.2.3.2.

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

You have omitted this information and you provided the following justification: *"An environmental risk assessment has indicated that the members of the Aromatic Sulphonic Acids category do not pose a risk to the aquatic environment for all relevant uses. In Annex IX of Regulation (EC) No 1907/2006 it is laid down that chronic toxicity tests shall be proposed by the registrant if the chemical safety assessment indicates the need to investigate further. Since the chronic testing would not change the outcome of the environmental risk assessment no additional chronic testing on aquatic invertebrates appears to be justified".*

We have assessed this information and identified the following issue:

> A registrant may only adapt this information requirement based on the general rules set out in Annex XI. It is noted that Column 2 of Annex IX, Section 9.1, does not allow omitting the need to submit information on long-term toxicity to fish under Column 1 (Decision of the Board of Appeal in case A-011-2018).
>
> Your justification to omit this information does not refer to any legal ground for adaptation under Annex XI to REACH.
>
> Therefore, you have not demonstrated that this information can be omitted.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you claim that you did not perform a long-term toxicity testing on aquatic invertebrates because the chemical safety assessment according to Annex I does not indicate the need to investigate further the effects on aquatic organisms. You also specify that new information on short-term aquatic toxicity will be provided and that it will be used to update your chemical safety assessment. You argue that depending on the outcome of the chemical safety assessment you will decide if long-term aquatic toxicity tesing is needed. You also specify that you intend to test only the most sensitive aquatic organism among fish and aquatic invertebrates.

However, as already explained under issue A. above, Annex IX, Section 9.1, Column 2 is not a waiver for the requirement to submit information on long-term toxicity to fish. Therefore any adaptation to omit this information requirement will need to rely on the general rules for adaptation set out in Annex XI to REACH.

4. Long-term toxicity testing on fish

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

You have omitted this information and you provided the following justification: *"An environmental risk assessment has indicated that the members of the Aromatic Sulphonic Acids category do not pose a risk to the aquatic environment for all relevant uses. In Annex IX of Regulation (EC) No 1907/2006 it is laid down that chronic toxicity tests shall be proposed by the registrant if the chemical safety assessment indicates the need to investigate further the effects on fish. Therefore, and for reasons of animal welfare, a long-term toxicity study in fish is not provided.".*

We have assessed this information and identified the following issue:

A registrant may only adapt this information requirement based on the general rules set out in Annex XI. It is noted that Column 2 of Annex IX, Section 9.1, does not allow omitting the need to submit information on long-term toxicity to fish under Column 1 (Decision of the Board of Appeal in case A-011-2018).

Your justification to omit this information does not refer to any legal ground for adaptation under Annex XI to REACH.

Therefore, you have not demonstrated that this information can be omitted. Minimisation of vertebrate animal testing is not on its own a legal ground for adaptation under the general rules of Annex XI.

On this basis, the information requirement is not fulfilled.

In your comments on the draft decision, you claim that you did not perform a long-term toxicity testing on fish because the chemical safety assessment according to Annex I does not indicate the need to investigate further the effects on aquatic organisms. You also specify that new information on short-term aquatic toxicity will be provided and that it will be used to update your chemical safety assessment. You argue that depending on the outcome of the chemical safety assessment you will decide if long-term aquatic toxicity tesing is needed. You also specify that you intend to test only on the most sensitive aquatic organism among fish and aquatic invertebrates.

However, as already explained under issue A. above, Annex IX, Section 9.1, Column 2 is not a waiver for the requirement to submit information on long-term toxicity to fish. Therefore any adaptation to omit this information requirement will need to rely on the general rules for adaptation set out in Annex XI to REACH.

Study design

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

Appendix D: Requirements to fulfil when conducting and reporting new tests for REACH purposes

A. Test methods, GLP requirements and reporting

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

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

3. Under Article 10(a)(vi) and (vii) of REACH, all new data generated as a result of this decision must be reported as study summaries, or as robust study summaries, if required under Annex I of REACH. See ECHA Practical Guide on How to report robust study summaries[6].

B. 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.

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[7].

[6] https://echa.europa.eu/practical-guides
[7] https://echa.europa.eu/manuals

Appendix E: Procedure

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

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

The compliance check was initiated on 13 February 2020.

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 F: List of references - ECHA Guidance[8] and other supporting documents

Evaluation of available information
Guidance on information requirements and chemical safety assessment, Chapter R.4 (version 1.1., December 2011), referred to as ECHA Guidance R.4 where relevant.

QSARs, read-across and grouping
Guidance on information requirements and chemical safety assessment, Chapter R.6 (version 1.0, May 2008), referred to as ECHA Guidance R.6 where relevant.

Read-across assessment framework (RAAF, March 2017)[9]

RAAF - considerations on multiconstituent substances and UVCBs (RAAF UVCB, March 2017)[9]

Physical-chemical properties
Guidance on information requirements and chemical safety assessment, Chapter R.7a (version 6.0, July 2017), referred to as ECHA Guidance R.7a in this decision.

Toxicology
Guidance on information requirements and chemical safety assessment, Chapter R.7a (version 6.0, July 2017), referred to as ECHA Guidance R.7a in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.7c (version 3.0, June 2017), referred to as ECHA Guidance R.7c in this decision.

Environmental toxicology and fate
Guidance on information requirements and chemical safety assessment, Chapter R.7a (version 6.0, July 2017), referred to as ECHA Guidance R.7a in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.7b (version 4.0, June 2017), referred to as ECHA Guidance R.7b in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.7c (version 3.0, June 2017), referred to as ECHA Guidance R.7c in this decision.

PBT assessment
Guidance on information requirements and chemical safety assessment, Chapter R.11 (version 3.0, June 2017), referred to as ECHA Guidance R.11 in this decision.

Guidance on information requirements and chemical safety assessment, Chapter R.16 (version 3.0, February 2016), referred to as ECHA Guidance R.16 in this decision.

Data sharing
Guidance on data-sharing (version 3.1, January 2017), referred to as ECHA Guidance on data sharing in this decision.

OECD Guidance documents[10]
Guidance Document on aqueous–phase aquatic toxicity testing of difficult test chemicals – No 23, referred to as OECD GD 23.

[8] https://echa.europa.eu/guidance-documents/guidance-on-information-requirements-and-chemical-safety-assessment
[9] https://echa.europa.eu/support/registration/how-to-avoid-unnecessary-testing-on-animals/grouping-of-substances-and-read-across
[10] http://www.oecd.org/chemicalsafety/testing/series-testing-assessment-publications-number.htm

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

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

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

Appendix G: Addressees of this decision and their corresponding information requirements

You must provide the information requested in this decision for all REACH Annexes applicable to you.

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

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.