

Helsinki, 12 June 2023

#### Addressee(s)

Registrant(s) of JS FR-3014 500-399-6 as listed in Appendix 3 of this decision

## **Date of submission of the dossier subject to this decision** 22 August 2017

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

Substance name: 2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction

products with 1-chloro-2,3-epoxypropane and 2,4,6-tribromophenol

EC number/List number: 500-399-6

**Decision number:** Please refer to the REACH-IT message which delivered this communication (in format CCH-D-XXXXXXXXXXXXXXXX)

#### **DECISION ON A COMPLIANCE CHECK**

Under Article 41 of Regulation (EC) No 1907/2006 (REACH), you must submit the information listed below by *17 September 2025*.

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

#### 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: OECD TG 471, 2020) using one of the following strains: E. coli WP2 uvrA, or E. coli WP2 uvrA (pKM101), or S. typhimurium TA102
- 2. Growth inhibition study on aquatic plants (Annex VII, Section 9.1.2.; test method: EU C.3/OECD TG 201)

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

- 3. If negative results are obtained in test performed for the information requirement of Annex VIII, Section 8.4.1. then: In vitro gene mutation study in mammalian cells (Annex VIII, Section 8.4.3.; test method: OECD TG 476 or TG 490)
- 4. Screening for reproductive/developmental toxicity (Annex VIII, Section 8.7.1.; test method: EU B.63/OECD TG 421 or EU B.64/OECD TG 422) by oral route, in rats
- 5. Long-term toxicity testing on fish (triggered by Annex VIII, Section 9.1.3., Column 2; test method: EU C.47./OECD TG 210)

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

## Information required depends on your tonnage band

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



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

#### How to comply with your information requirements

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

You must follow the general requirements for testing and reporting new tests under REACH, see Appendix 4.

#### **Appeal**

This decision, when adopted under Article 51 of REACH, may be appealed to the Board of Appeal of ECHA within three months of its notification to you. Please refer to <a href="http://echa.europa.eu/regulations/appeals">http://echa.europa.eu/regulations/appeals</a> 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<sup>1</sup> under the authority of Mike Rasenberg, Director of Hazard Assessment

Appendix 1: Reasons for the request(s)

Appendix 2: Procedure

Appendix 3: Addressees of the decision and their individual information requirements

Appendix 4: Conducting and reporting new tests under REACH

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<sup>&</sup>lt;sup>1</sup> As this is an electronic document, it is not physically signed. This communication has been approved according to ECHA's internal decision-approval process.

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## Appendix 1: Reasons for the request(s)

LO	nte	ents

Rea	Reasons related to the information under Annex VII of REACH	
	In vitro gene mutation study in bacteria	
2.	Growth inhibition study aquatic plants	4
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4.	Screening for reproductive/developmental toxicity	6
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#### Reasons related to the information 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, Section 8.4.1.
  - 1.1. Information provided
- You have provided an *in vitro* gene mutation study in bacteria (1995) with the Substance (study i).
  - 1.2. Assessment of the information provided
- To fulfil the information requirement, a study must comply with OECD TG 471 (Article 13(3) of REACH). Therefore, the following specification must be met:
  - a) the test is 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).
- 4 In study(i):
  - a) the test was performed with the strains *S. typhimurium* TA 1535, TA 1537, TA 98 and TA 100 (i.e., the strain *S. typhimurium* TA102 or *E. coli* WP2 uvrA or *E. coli* WP2 uvrA (pKM101) is missing).
- 5 The information provided does not cover the specification(s) required by the OECD TG 471.
- 6 Therefore, the information requirement is not fulfilled.
  - 1.3. Specification of the study design
- To fulfil the information requirement for the Substance, the *in vitro* gene mutation study in bacteria (OECD TG 471, 2020) should be performed using one of the following strains: *E. coli* WP2 uvrA, or *E. coli* WP2 uvrA (pKM101), or *S. typhimurium* TA102.

#### 2. Growth inhibition study aquatic plants

- 8 Growth inhibition study on aquatic plants is an information requirement under Annex VII to REACH (Section 9.1.2.).
  - 2.1. Information provided
- ECHA understands that you have adapted this information requirement by using Annex XI, Section 2 (testing is technically not possible). To support the adaptation, you have provided the following justification: the overall mean water solubility was less than the LOQ (1.00  $\mu$ g/L).
  - 2.2. Assessment of the information provided

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- 10 Under Annex XI, Section 2, a study may be omitted if it is technically not feasible to conduct because of the properties of the substance.
- You claim that the study was technically not feasible due to low water solubility of the Substance, however you do not provide evidence to demonstrate that it was technically not feasible. Furthermore, you report an OECD TG 211 long-term toxicity test on Daphnia magna where testing of the Substance was technically feasible under specific test conditions.
- Based on the above, your adaptation is rejected and the information requirement is not fulfilled.

#### 2.3. Study design and test specifications

- The Substance is difficult to test due to the low water solubility (<1.00  $\mu$ g/L) and adsorptive properties (Log  $K_{ow}$  >6.5). The OECD TG 201 specifies that, for difficult to test substances, you must consider the approach described in the OECD GD 23 or other approaches, if more appropriate for your substance. In all cases, the approach selected must be justified and documented. Due to the properties of Substance, it may be difficult to achieve and maintain the desired exposure concentrations. Therefore, you must monitor the test concentration(s) of the Substance throughout the exposure duration and report the results. If it is not possible to demonstrate the stability of exposure concentrations (i.e. measured concentration(s) not within 80-120% of the nominal concentration(s)), you must express the effect concentration based on measured values as described in the OECD TG 201. In case a dose-response relationship cannot be established (no observed effects), you must demonstrate that the approach used to prepare test solutions was adequate to maximise the concentration of the Substance in the test solution.
- For multi-constituents/UVCBs, the analytical method must be adequate to monitor qualitative and quantitative changes in exposure to the dissolved fraction of the test material during the test (e.g. by comparing mass spectral full-scan GC or HPLC chromatogram peak areas or by using targeted measures of key constituents or groups of constituents).
- 15 If you decide to use the Water Accommodated Fraction (WAF) approach, in addition to the above, you must:
  - use loading rates that are sufficiently low to be in the solubility range of most constituents (or that are consistent with the PEC value). This condition is mandatory to provide relevant information for the hazard and risk assessment (Guidance on IRs and CSA, Appendix R.7.8.1-1, Table R.7.8-3);
  - provide a full description of the method used to prepare the WAF (including, among others, loading rates, details on the mixing procedure, method to separate any remaining non-dissolved test material including a justification for the separation technique);
  - prepare WAFs separately for each dose level (i.e. loading rate) and in a consistent manner.



#### Reasons related to the information under Annex VIII of REACH

#### 3. In vitro gene mutation study in mammalian cells

- An *in vitro* gene mutation study in mammalian cells is an information requirement under Annex VIII, 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.
  - 3.1. Triggering and conditionality of the information requirement
- Your dossier contains (I) a negative result for *in vitro* cytogenicity study in mammalian cells, and (II) inadequate data for *in vitro* gene mutation study in bacteria.
- The *in vitro* gene mutation study in bacteria provided in the dossier is rejected for the reasons provided in request 1.
- The result of the request 1 will determine whether the present requirement for an *in vitro* mammalian cell gene mutation study in accordance with Annex VIII, Section 8.4.3. is triggered.
- 20 Consequently, you are required to provide information for this information requirement, if the *in vitro* gene mutation study in bacteria provides a negative result.
  - 3.2. Information provided
- 21 You have not submitted any information for *in vitro* gene mutation study in mammalian cells.
  - 3.3. Specification of the study design
- To fulfil the information requirement for the Substance, either the *in vitro* mammalian cell gene mutation tests using the hprt and xprt genes (OECD TG 476) or the thymidine kinase gene (OECD TG 490) are considered suitable.

## 4. Screening for reproductive/developmental toxicity

- A screening study for reproductive/developmental toxicity study (OECD 421 or OECD 422) is an information requirement under Annex VIII, Section 8.7.1.
  - 4.1. No information provided
- You have not submitted any information for this requirement of a screening study for reproductive/developmental toxicity. Therefore, the information requirement is not fulfilled.
  - 4.2. Specification of the study design
- A study according to the test method EU B.63/OECD TG 421 or EU B.64/OECD TG 422 must be performed in rats.
- As the Substance is a solid, the study must be conducted with oral administration of the Substance (Annex VIII, Section 8.7.1, Column 1).



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

#### 5. Long-term toxicity testing on fish

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

## 5.1. Triggering of the information requirement

- Poorly water soluble substances require longer time to reach steady-state conditions. As a result, the short-term tests do not give a true measure of toxicity for this type of substances and the long-term test is required.
- You have provided information which indicates that the Substance includes constituents that are poorly water soluble. You report an OECD TG 105 Column elution method (2012) study, where the water solubility of the Substance (F-3014), based on each of the four identified peaks, was less than the LOQ (1.00  $\mu$ g/L).
- Therefore, the Substance is poorly water soluble and information on long-term toxicity on fish must be provided.
- 32 You have not provided any information on long-term toxicity on fish for the Substance.
- In the absence of information on long-term toxicity on fish, this information requirement is not fulfilled.

#### 5.2. Study design and test specifications

- To fulfil the information requirement for the Substance, the Fish, Early-life Stage Toxicity Test (test method OECD TG 210) is the most appropriate (Guidance on IRs and CSA, Section R.7.8.2.).
- OECD TG 210 specifies that, for difficult to test substances, OECD GD 23 must be followed. As already explained above, the Substance is difficult to test. Therefore, you must fulfil the requirements described for difficult to test substances in "Study design and test specifications" set out in the reasons for request 2 above.



#### References

The following documents may have been cited in the decision.

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

Chapter R.4 Evaluation of available information; ECHA (2011). Chapter R.6 QSARs, read-across and grouping; ECHA (2008).

Appendix to Chapter P. 6 for paneforms: ECHA (2006).

Appendix to Chapter R.6 for nanoforms; ECHA (2019).

Chapter R.7a Endpoint specific guidance, Sections R.7.1 – R.7.7; ECHA (2017).

Appendix to Chapter R.7a for nanomaterials; ECHA (2017).

Chapter R.7b Endpoint specific guidance, Sections R.7.8 – R.7.9; ECHA (2017).

Appendix to Chapter R.7b for nanomaterials; ECHA (2017).

Chapter R.7c Endpoint specific guidance, Sections R.7.10 – R.7.13; ECHA (2017).

Appendix to Chapter R.7a for nanomaterials; ECHA (2017).

Appendix R.7.13-2 Environmental risk assessment for metals and metal

compounds; ECHA (2008).

Chapter R.11 PBT/vPvB assessment; ECHA (2017).

Chapter R.16 Environmental exposure assessment; ECHA (2016).

Guidance on data-sharing; ECHA (2017).

Guidance for monomers and polymers; ECHA (2012).

**Guidance on intermediates;** ECHA (2010).

All guidance documents are available online: <a href="https://echa.europa.eu/guidance-">https://echa.europa.eu/guidance-</a>

documents/guidance-on-reach

#### Read-across assessment framework (RAAF)

RAAF, 2017 Read-across assessment framework (RAAF); ECHA (2017).

RAAF UVCB, 2017 Read-across assessment framework (RAAF) – considerations on

multi- constituent substances and UVCBs; ECHA (2017).

The RAAF and related documents are available online:

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

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

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



## **Appendix 2: Procedure**

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

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

The compliance check was initiated on 01 February 2022.

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

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

ECHA did not receive any comments within the commenting period.

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

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



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

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

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

Registrant Name	Registration number	Highest REACH Annex applicable to you

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



#### Appendix 4: Conducting and reporting new tests for REACH purposes

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

#### 1.1. Test methods, GLP requirements and reporting

- (1) Under Article 13(3) of REACH, all new data generated as a result of this decision must be conducted according to the test methods laid down in a European Commission Regulation or to international test methods recognised by the Commission or ECHA as being appropriate.
- (2) Under Article 13(4) of REACH, ecotoxicological and toxicological tests and analyses must be carried out according to the GLP principles (Directive 2004/10/EC) or other international standards recognised by the Commission or ECHA.
- (3) Under Article 10(a)(vi) and (vii) of REACH, all new data generated as a result of this decision must be reported as study summaries, or as robust study summaries, if required under Annex I of REACH. See ECHA Practical Guide on How to report robust study summaries<sup>2</sup>.
- (4) Under the introductory part of Annexes VII/VIII/IX/X to REACH, where a test method offers flexibility in the study design, for example in relation to the choice of dose levels or concentrations, the chosen study design must ensure that the data generated are adequate for hazard identification and risk assessment.

#### 1.2. Test material

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

(1) Selection of the Test material(s)

The Test Material used to generate the new data must be selected taking into account the following:

- the variation in compositions reported by all members of the joint submission,
- the boundary composition(s) of the Substance,
- the impact of each constituent/ impurity on the test results for the endpoint to be assessed. For example, if a constituent/ impurity of the Substance is known to have an impact on (eco)toxicity, the selected Test Material must contain that constituent/ impurity.
- (2) Information on the Test Material needed in the updated dossier
  - You must report the composition of the Test Material selected for each study, under the "Test material information" section, for each respective endpoint study record in IUCLID.

<sup>&</sup>lt;sup>2</sup> <u>https://echa.europa.eu/practical-guides</u>



• The reported composition must include all constituents of each Test Material and their concentration values.

With that detailed information, ECHA can confirm 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 (<a href="https://echa.europa.eu/manuals">https://echa.europa.eu/manuals</a>).

## 2. General recommendations for conducting and reporting new tests

## 2.1 Environmental testing for substances containing multiple constituents

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

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

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

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