~~Confidential~~

Helsinki, 13 October 2023

Addressee
Registrant as listed in Appendix 3 of this decision

Date of submission of the dossier subject to this decision
04/02/2013

Registered substance subject to this decision ("the Substance")
Substance name: 2-[(8-amino-7-{[4-substituted-2-sulfonatophenyl]diazenyl}-1-hydroxy-3,6-disulfonaphthalen-2-yl)diazenyl]-4-[(4-chloro-6-{[3-(substituted)phenyl](ethyl)amino}-heteromonocycl-2-yl)amino]arylsulfonic acid, potassium and sodium salts
EC/List number: [redacted]

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 ***20 April 2026***.

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

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

1. In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.; test method: OECD TG 471, 2020) with Prival modification

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

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

3. Simulation testing on ultimate degradation in surface water (triggered by Annex VIII, Section 9.2.; test method: EU C.25./OECD TG 309) at a temperature of 12°C.

4. Identification of degradation products (triggered by Annex VIII, Section 9.2; test method: EU C.25./OECD TG 309)

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

Information required depends on your tonnage band

You must provide the information listed above for all REACH Annexes applicable to you in accordance with Articles 10(a) and 12(1) of REACH. The 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 http://echa.europa.eu/regulations/appeals for further information.

Failure to comply

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

Authorised[1] under the authority of Mike Rasenberg, Director of Hazard Assessment

Appendix 1: Reasons for the decision
Appendix 2: Procedure
Appendix 3: Addressees of the decision and their individual information requirements
Appendix 4: Conducting and reporting new tests under REACH

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

Appendix 1: Reasons for the decision

Contents

0. Reasons common to several requests

0.1. Comments to the draft decision - read-across adaptation rejected

1 In your comments to the draft decision you indicate your intention to adapt the following standard information requirements by using grouping and read-across approach under Annex XI, Section 1.5:

- In vitro gene mutation study in bacteria (Annex VII, Section 8.4.1.)

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

3 Annex XI, Section 1.5. specifies two conditions which must be fulfilled whenever a read-across approach is used. Firstly, there needs to be structural similarity between substances which results in a likelihood that the substances have similar physicochemical, toxicological and ecotoxicological properties so that the substances may be considered as a group or category. Secondly, it is required that the relevant properties of a substance within the group may be predicted from data for reference substance(s) within the group.

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

0.1.1. Scope of the grouping of substances

0.1.1.1. Identification of source substances

5 You predict the properties of the Substance from information obtained from the following source substance(s):

- [redacted] (EC 451-440-9).

6 You did not provide a complete reasoning for the prediction of toxicological properties but anticipate the source study details and a detailed read-across justification will be submitted to ECHA in a dossier update.

7 You describe the source substance as "sharing a high structural similarity with the Substance".

8 Based on the incomplete read-across documentation available in the comments to the draft decision, ECHA understands that your read-across hypothesis assumes that different compounds have the same type of effects. You predict the properties of your Substance to be quantitatively equal to those of the source substance.

0.1.2. Predictions for toxicological properties

0.1.2.1. Inadequate read-across hypothesis

9 Annex XI, Section 1.5. requires that whenever read-across is used adequate and reliable documentation of the applied method must be provided. Such documentation must include an explanation why the properties of the Substance may be predicted from other substances in the group, i.e. a read-across hypothesis. This hypothesis should be based on recognition of the structural similarities and differences between the substances (Guidance on IRs and

CSA, Section R.6.). It should explain why the differences in the chemical structures should not influence the toxicological properties or should do so in a regular pattern, taking into account that variations in chemical structure can affect both toxicokinetics (uptake and bioavailability) and toxicodynamics (e.g. interactions with receptors and enzymes) of substances (Guidance on IRs and CSA, Section R.6.2.1.3.).

10 Your read-across hypothesis is only based on the structural similarity between the source substance, which you consider a sufficient basis for predicting the properties of the Substance. However, your hypothesis does not explain why the structural differences between the substances do not influence the toxicological properties or do so in a regular pattern.

11 While structural similarity is a prerequisite for applying the grouping and read-across approach, it does not necessarily lead to predictable or similar toxicological properties. You have not provided a well-founded hypothesis to establish a reliable prediction for a toxicological explaining why the structural differences do not influence toxicokinetics and toxicodynamics of the substances, and thus why the properties of the Substance may be predicted from information on the source substance.

0.1.2.2. Missing robust study summaries

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

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

14 In your comments to the draft decision you have identified an in vitro gene mutation study in bacteria and an in vitro gene mutation study in mammalian cells with the source substance that you intend to include in a dossier update.

15 You did not provide robust study summaries in the comments that would allow ECHA to make an independent assessment of the studies (e.g. study methods and tabulated results missing).

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

0.1.2.3. Missing supporting information to compare the properties of the substances

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

18 Supporting information must include i) studies to compare properties of the source substance(s) and the Substance, and/or ii) multiple source studies with such source substance(s) that account for the structural differences of the parent compounds structures.

19 As indicated above, your read-across hypothesis is based on the assumption that the structurally similar source substance(s) cause the same type of effect(s). In this context,

relevant, reliable and adequate information allowing to compare the properties of the source substance(s) is necessary to confirm that the substances cause the same type of effects. Such information can be obtained, for example, from bridging studies with relevance to the adapted endpoint, which are of comparable design and duration, and have been conducted both with the Substance and the source substance(s).

20 In your comments to the draft decision you included an overview of OECD QSAR Toolbox rat liver metabolism simulator results for the Substance and the source substance.

21 ECHA acknowledges your intention to develop a read-across approach but notes that the Substance and the source substance are structurally different and can be assumed to have different toxicological properties in absence of supporting information to compare their properties.

22 However, in the absence of complete read-across justification documentation, you have not established that the Substance and the source substance(s) are likely to have similar properties. Therefore you have not provided sufficient supporting information to scientifically justify the read-across.

0.1.3. Conclusion on the read-across adaptation

23 For the reasons above, you have not established that relevant properties of the Substance can be predicted from data on the source substance(s).

0.2. Comments to the draft decision - Substance-tailored exposure-driven testing adaptation rejected

24 ECHA understands that you may have sought adaptation of the following standard information requirement(s) under Annex XI, Section 3.2 (a) or (c) substance-tailored exposure-driven testing:

- Simulation testing on ultimate degradation in surface water (Annex IX, Section 9.2.1.2.),
- Identification of degradation products (Annex IX, Section 9.2.3.).

This is because in the comments to the draft decision, you provide arguments regarding negligible environmental release of the Substance.

Regarding adaptation, it is the duty of a registrant who submits an adaptation to set out clearly the provision of Annexes VII to XI on which the adaptation is based, the grounds for the adaptation, and the scientific information which substantiates those grounds.

However, you have neither specified the legal basis nor any more concrete grounds for the adaptation.

In the absence of information, in the registration dossier and your comments, that would allow an independent assessment of the adaptation, ECHA must reject it.

Regarding adaptions under Annex XI, Sections 3, ECHA further observes the following:

25 A substance-tailored exposure-driven testing adaptation must fulfil the cumulative conditions set out under Annex XI, Sections 3(1) as well as 3(2)(a), (b) or (c).

0.2.1. Lack of appropriate PNEC

26 Under Annex XI, Section 3.2(a)(ii) and (iii), a relevant and appropriate predicted no effect concentration (PNEC) must be derived and the results of the exposure assessment must

show that exposures are always well below the PNEC, i.e. risk characterisation ratios RCRs must always be well below 1.

27 For substances satisfying the PBT and vPvB criteria of Annex XIII long-term effects and the estimation of the long-term exposure cannot be carried out with sufficient reliability (Annex I, Section 4.0.1). As a result, for such substances, PNECs and PECs cannot be derived with sufficient reliability to demonstrate that the ratio between PECs and the PNEC are always well below 1.

28 As explained in request 3, the information from your dossier does not allow excluding that the Substance is PBT/vPvB.

29 Therefore, you have neither demonstrated that an appropriate PNEC can be derived nor that RCRs are well below 1.

0.2.2. Substance is not handled under strictly controlled conditions

30 Under Annex XI, Section 3(2)(c), it must be demonstrated and documentated for all relevant scenarios that throughout the life cycle strictly controlled conditions as set out in Article 18(4)(a) to (f) apply (see further Guidance on Intermediates and Practical Guide 16).

31 You have not claimed that the Substance is used under strictly controlled conditions and you have not provided any documentation.

32 Therefore, the use of the Substance under strictly controlled conditions is not demonstrated.

0.2.3. Conclusion on the substance-tailored exposure driven testing adaptation

33 Based on the above, substance-tailored exposure driven testing adaptation under Annex XI, Section 3. has not been demonstrated by you.

Reasons related to the information under Annex VII of REACH

1. In vitro gene mutation study in bacteria

34 An in vitro gene mutation study in bacteria is an information requirement under Annex VII, Section 8.4.1.

1.1. Information provided

35 You have provided:

(i) An *in vitro* gene mutation study in bacteria (2010) with the Substance

1.2. Assessment of the information provided

1.2.1. The provided study does not meet the specifications of the test guideline(s)

36 To fulfil the information requirement, a study must comply with the OECD TG 471 (Article 13(3) of REACH). Therefore, the following specifications must be met:

a) if the Substance is an azo-dye or a diazo-compound, the test in presence of metabolic activation is performed following the Prival modification.

37 In study (i) described as an in vitro gene mutation study on bacteria:

b) although the tested substance is an azo-dye, the test in presence of metabolic activation was not performed following the Prival modification.

38 The information provided does not cover the specification(s) required by the OECD TG 471.

1.2.2. On the information provided in your comments

39 In your comments to the draft decision you indicate to adapt the information requirement by using a grouping and read-across approach under Annex XI, Section 1.5. These comments have been addressed under Section 0.1 of this decision.

40 In your comments to the draft decision you are referring to the OECD TG 473 in vitro chromosome aberration test and the OECD TG 474 mammalian erythrocyte micronucleus study with the Substance included in your dossier. However, ECHA notes that the studies are related to cytogenicity whereas the information requirement is related to gene mutation.

41 Therefore, the information requirement is not fulfilled.

1.3. Specification of the study design

42 To fulfil the information requirement for the Substance, the in vitro gene mutation study in bacteria (OECD TG 471, 2020) is considered suitable.

43 Your Substance is an azo dye for which the standard procedure may not detect all mutations. Therefore, you are required to use the Prival modification (see Paragraph 10 of OECD TG 471).

Reasons related to the information under Annex VIII of REACH

2. Adsorption/ desorption screening

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

2.1. Information provided

i. In the registration dossier, you have provided a study conducted with the Substance, using the Estimation of the Adsorption Coefficient (K_{oc}) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC) test method (EU C.19 / OECD TG 121).

ii. In the comments to the draft decision, you have provided a study conducted with the Substance with the the Adsorption - Desorption Using a Batch Equilibrium test method (EU C.18 / OECD TG 106).

2.2. Assessment of the information provided

45 To fulfil the information requirement, study i. must comply with the OECD TG 121 (Article 13(3) of REACH). Therefore, the following specifications must be met:

46 Applicability domain

a) The method is applicable to substances having a log K_{oc} between 1.5 and 5.

47 Technical specifications impacting the sensitivity/reliability of the test

b) The reference substances have log K_{oc} values which encompass the log K_{oc} of the test material.

48 Your registration dossier provides an OECD TG 121 showing the following:

49 Applicability domain

a) The Substance has a log K_{oc} < 1.25, therefore it is out of the applicability domain of the test method. You also report that no retention was found for the test item.

50 Technical specifications impacting the sensitivity/reliability of the test

b) The reference substances have log K_{oc} values (range of log K_{oc} values: 1.25-5.63) which do not encompass the log K_{oc} of the test material.

51 Based on the above,

- there are critical methodological deficiencies resulting in the rejection of the study results since the Substance is outside the applicability domain of the OECD TG 121.

52 Therefore, the specifications of OECD 121 are not met.

53 We have identified the following issues in study ii.:

54 To fulfil the information requirement, study ii. must comply with the OECD TG 106 (Article 13(3) of REACH). Therefore, the following specifications must be met:

Technical specifications impacting the sensitivity/reliability of the test

a) If the amount of the test material adsorbed to soil is determined as the difference

between the amount of test material initially present in solution and the amount remaining at the end of the experiment (*i.e.* the indirect method), the extent to which the substance adsorb to the test vessels and the stability of the substance during the test are checked;

b) The organic carbon, clay content and soil texture and pH of the selected soils is determined;

c) A preliminary study (tier 1) fulfils the following conditions:
   - two soil types and three soil/solution ratios (*i.e.* 1:1, 1:5 and 1:25) are used,
   - the pH of the aqueous solution is measured before and after contact with the soil,
   - samplings are taken with sufficient frequency to determine the equilibration time,

d) A screening test (tier 2) fulfils the following conditions:
   - five soils are used,
   - the pH of the aqueous solution is measured before and after contact with the soil,
   - samplings are taken with sufficient frequency to determine the equilibration time.

Reporting of the methodology and results

e) The results of all individual measurements are reported in a tabular form for each of the tests (tier 1, tier 2).

55 In study (ii):

Technical specifications impacting the sensitivity/reliability of the test

a) The amount of the test material adsorbed to soil was determined as the difference between the amount of test material initially present in solution and the amount remaining at the end of the experiment (*i.e.* the indirect method), but the extent to which the substance adsorbs to the test vessels and the stability of the substance during the test were not checked. Further, you report that the mass balance rate in acetonitrile and water in two soil types tested (chernozem ESS-1, brown soil ESS-2) was 0.27%, 2.91% and 0.00%, 0.68%; and in the third soil type tested (red soil ESS-3) it was 0% and 0% respectively. You report that based on this, the requirement of the quality of 80% to 120% recovery of the sample was not met;

b) The clay content and soil texture and pH of the selected soils was not determined;

c) You have not reported the preliminary study (tier 1).

d) In the screening test (tier 2):
   - three soils were used, instead of five;
   - the pH of the aqueous solution was not measured before and after contact with the soil,
   - you have not reported the frequency of the sampling taken to determine the equilibration time,

Reporting of the methodology and results

e) The results of all individual measurements are not reported in a tabular form for each of the tests (tier 1, tier 2).

56 Based on the above,

- there are critical methodological deficiencies resulting in the rejection of the study results. More specifically, you have not established the mass balance of the

Substance as you have not quantified the amount of test substance adsorbed onto the surfaces of the test vessels and you have not achieved a sufficiently high recovery rate for the analytical determinations.

- the reporting of the study is not sufficient to conduct an independent assessment of its reliability. As explained in request 4 of this decision, the Substance is ionisable. Because of this, the adsorption behaviour of the Substance is expected to be affected by the pH value of the test solutions and soils. However, you have not reported relevant pH measurements. Further, you have not reported the conditions and results of tier 1 investigations and you have not reported individual measurements on which the calculated log K_{OC} values are based. Because of this, ECHA cannot independently verify the reliability of the study.

57 Therefore, the specifications of OECD 106 are not met.

58 On this basis, the information requirement is not fulfilled.

2.3. Specification of the test selection and study design

59 The OECD TG 106 Batch Equilibrium Method is the appropriate method to study the adsorption of the Substance. This method uses a range of actual soils and so represents a more realistic scenario than the HPLC (OECD 121) method. The ionisable properties of the Substance should be considered when selecting the appropriate test design. For ionisable substances, soil types should cover a wide range of pH.

3. Simulation testing on ultimate degradation in surface water

60 Further degradation testing must be considered if the chemical safety assessment (CSA) according to Annex I indicates the need to investigate further the degradation of the substance (Annex VIII, Section 9.2., Column 2).

3.1. Triggering of the information requirement

61 This information requirement is triggered in case the chemical safety assessment (CSA) indicates the need for further degradation investigation (Annex I, Section 4; Annex XIII, Section 2.1), such as if the substance is a potential PBT/vPvB substance (Guidance on IRs and CSA, Section R.11.4.). This is the case if the Substance itself or any of its constituent or impurity present in concentration ≥ 0.1% (w/w) or relevant transformation/degradation product meets the following criteria:

- it is potentially persistent or very persistent (P/vP) as:
  - it is not readily biodegradable (*i.e.* <60% degradation in an OECD 301F), and
  - it shows <70% degradation within 14 days in an inherent biodegradation test OECD 302B and/or lag phase > 3 days;
- it is potentially bioaccumulative or very bioaccumulative (B/vB) as:
  - for some groups of substances (e.g. organometals, ionisable substances, surfactants) other partitioning mechanisms may drive bioaccumulation (e.g. binding to protein/cell membranes) and high potential for bioaccumulation cannot be excluded solely based on its potential to partition to lipid.

62 Your registration dossier provides the following:

- the Substance is not readily biodegradable (0% degradation after 28 days in

OECD TG 301F);
- the Substance is not inherently biodegradable (5-9% degradation after 28 days in OECD TG 302B ;
- the Substance is an ionisable substance and therefore high potential for bioaccumulation cannot be excluded based on available information.

63 Under section 2.3 of your IUCLID dossier and section 8 of your CSR ('PBT assessment'), you conclude that the Substance is P/vP, but does not fulfil the B/vB criterion. In support of your conclusion you provide the following additional information:

- You report that the log K_{ow} of the Substance is < -3.2. On this basis, you conclude that the Substance does not fulfil the B/vB criterion.

64 However, the Substance is ionisable on the basis of the following pieces of information:

- the Substance is permanently ionised at environmental pH (i.e. in the 4-9 pH range), on the basis of an ACD/Percepta estimation of the dissociation behaviour;
- in section 1.2 of your IUCLID dossier, you report that the Substance is a sodium, potassium salt and you provide a structural formula that indicates that the structure includes multiple sulphate groups and is charged;
- in section 4.8 of your IUCLID dossier, you report that the Substance is very soluble (water solubility: 473.7 g/L at 22.6°C), which is also in line with the dissociation behaviour mentioned above.

65 Because of the ionisable properties of the Substance, the potential for bioaccumulation of the Substance may not be solely driven by lipophilicity. Therefore, a bioaccumulation study shall not be waived on the basis of the octanol-water partition coefficient value alone, as log K_{ow} is not a reliable predictor of bioaccumulation potential for this type of substances.

66 Therefore, the additional information from your PBT assessment is not adequate to conclude that the Substance is not a potential PBT/vPvB substance.

67 Further, you have not provided a simulation study which would allow you to conclude on persistence of the Substance.

68 Based on the above, the available information on the Substance indicates that it is a potential PBT/vPvB substance. Further, the additional information from your PBT assessment is not adequate to conclude on the PBT/vPvB properties of the Substance.

3.2. Information provided in the comments to the draft decision relevant to the potential PBT properties of the Substance and assessment of the provided information

69 In the comments to the draft decision, you have provided the following:

- study i.) - an OECD TG 305-I study (2014) with the Substance;
- a justification related to the toxicokinetic behaviour of the Substance. You based these toxicokinetic considerations on physico-chemical properties of the Substance, and on observations from mammalian studies (OECD TG 407 Repeated Dose 28-day Oral Toxicity Study in Rodents; OECD TG 421 Reproduction/Developmental Toxicity Screening Test; OECD TG 414 Prenatal developmental toxicity study) conducted with the Substance. On this basis, you claim that the Substance has a low potential for bioaccumulation.

70 ECHA understands that you have provided the above information relevant to the B/vB assessment of the Substance, in order to show that the Substance is not a potentially PBT/vPvB substance.

71 However, the provided information does not change the above conclusion. This is because the provided information is insufficient to conclude on the B/vB assessment of the Substance.

72 In accordance with Annex XIII, Section 3.2., in order to assess if a substance fulfils the bioaccumulation criterion, results from a bioconcentration study in fish, such as study i.) shall to be taken into account in the assessment.

73 However, in order to determine whether study i.) can reliably contribute to the assessment of B or vB properties, it must be assessed against the specifications of the OECD TG 305-I test guideline. To comply with the OECD TG 305 the following specifications must be met:

Key parameters

a) the study covers the following key parameters:
   - the uptake rate constant (k_1)

Technical specifications impacting the sensitivity/reliability of the test

b) the dilution water fulfils the following conditions: particulate matter ≤ 5 mg/L, total organic carbon (TOC) ≤ 2 mg/L, pH between 6.0 and 8.5;

Reporting of the methodology and results

c) individual fish wet weights and total lengths for all sampling intervals are provided and be linked to the analysed chemical concentration for that individual. The data are used to correct the BCF for growth dilution, and the of growth rate constant(s) are provided;
d) tabulated test material concentration data in individual fish (C_f) and water (C_w) (including mean values for test group and control, standard deviation and range, if appropriate) for all sampling times as well as C_w values for the control series (background) are provided;

74 In study (i):

Key parameters

a) you have not reported the uptake rate constant (k_1);

Technical specifications impacting the sensitivity/reliability of the test

b) you have not reported the TOC and particulate matter of the dilution water ;

Reporting of the methodology and results

c) individual fish wet weights and total lengths for all sampling intervals were not reported;
d) tabulated test material concentration data in individual fish and water (including mean values for test group and control, standard deviation and range, if appropriate) for all sampling times are not reported;

75 Based on the above,

- the information provided does not cover the key parameters required by the OECD TG 305, as you have not reported the uptake rate constant calculated based on the study observations.
- there are critical methodological deficiencies resulting in the rejection of the study results. More specifically, you have not reported some of the properties of the dilution water (including concentration of particulate matter) that may have potentially influenced the dissolved concentration of the test substance that was available for uptake during the test.
- the reporting of the study is not sufficient to conduct an independent assessment of its reliability. More specifically, you have not reported key pieces of information

that are relevant to the validity criteria of the study (including observations related to the growth of individual fish and whether significant differences in growth were found between the treatment and control groups and to the actual exposure concentration during the test). Because of this, ECHA is not in the position to independently verify the validity and reliability of the study.

76 On this basis, the specification(s) of OECD TG 305 are not met. Because of this, study i.) is considered not reliable.

77 Under Annex XIII, Section 3.2., available information on the toxicokinetic behaviour of the substance has to be considered for the assessment of B/vB properties, provided that its suitability and reliability can be reasonably demonstrated.

78 In the comments to the draft decision, you have provided a justification related to the toxicokinetic behaviour of the Substance, arguing that the Substance has low potential for bioaccumulation. You based this justification on physico-chemical properties of the Substance (e.g. log Pow, vapour pressure, molecular weight of the Substance), and on observations from mammalian studies conducted with the Substance. You argue that the substance is expected to be taken up mainly via the oral route; will likely be distributed among organs; it will be metabolized; and finally, it will be excreted via bile and through urine.

79 However, you have not provided any new scientific data (e.g. experimental data on toxicokinetic behaviour, and in particular, on elimination processes) that could support your claims.

80 On this basis, your justification related to the low bioaccumulation potential of the Substance is rejected.

3.3. Information provided to meet the simulation testing on ultimate degradation in surface water information requirement in the comments to the draft decision

81 In the comments to the draft decision, you have provided the following information:

i. You argue that the environmental releases of the Substance are negligible.

ii. You indicate your intention to submit QSAR data to identify the potential degradation products of the Substance and provide screening information on their PBT/vPvB properties.

iii. You claim that radiolabelling of dyes is technically challenging.

iv. You claim that the Substance does not pose any hazard to the environment, based on available data from aquatic and terrestrial tests. In relation to this, you propose to conduct sediment toxicity testing to be able to conclude on the lack of ecotoxicity of the Substance.

82 ECHA understands that in points i. ii., and iii., you may have sought adaptation of the information requirement under Annex XI, Section 3, Annex XI, Section 1.3, and Annex XI, Section 2, respectively.

3.4. Assessment of the information provided

3.4.1. Issues identified with information provided to meet the simulation testing on ultimate degradation in surface water information requirement

3.4.1.1. Substance-tailored exposure-driven testing adaptation rejected

83 ECHA understands that in point i., you may have sought adaptation of the the information requirement by means of substance-tailored exposure-driven testing, under Section 3 of Annex XI.

84 As explained above in Section 0.2 of this decision, your adaptation under Annex XI, Section 3 is rejected.

3.4.1.2. The QSAR result is not equivalent to results obtained from the required experimental test

85 In point ii., you propose to follow a tiered approach, in which you identify the potential biodegradation products of the substance using an appropriate QSAR model (you mention the EAWAG-BBD Pathway Prediction System as an example) and then screen the PBT properties of the potential biodegradation products using appropriate QSAR models.

86 ECHA understands that in point ii., you may have indicated your intention to provide an adaptation of the the information requirement by means of qualitative or quantitative structure-activity relationship models ((Q)SARs), under Section 1.3 of Annex XI.

87 ECHA acknowledges your intention to submit a new adaptation as part of a future dossier update. However, as indicated in your comments, this strategy relies essentially on data which is yet to be generated, therefore no conclusion on the compliance can currently be made.

88 Further, ECHA notes that results from (Q)SAR models are adequate for risk assessment or classification and labelling when they are equivalent to results obtained from the required experimental test. The corresponding study that must normally be performed for this particular information requirement is test method OECD TG 309, which measures the following key parameters:

i. the rate of aerobic transformation of the test material in natural surface water;

ii. the identity and rates of formation and decline of transformation/degradation products are determined if those are detected at ≥ 10% of the applied radioactivity (AR) in the total water-sediment system at any sampling time, or are continuously increasing during the study even if their concentrations are < 10% AR (unless appropriate justification is provided).

89 You have indicated your intention to provide predictions from the (Q)SAR model EAWAG-BBD Pathway Prediction System, which predicts plausible pathways for microbial degradation of chemical compounds by using biotransformation rules, which based on reactions found in the EAWAG-BBD database or in the scientific literature.

90 The model predicts potential biodegradation products but does not measure the rate of aerobic transformation of the test material in natural surface water and the rates of formation and decline of transformation/degradation products. Therefore, the prediction you have indicated to submit would not be adequate to meet the information requirement for soil simulation testing for the purpose of classification and labelling and/or risk assessment.

3.4.1.3. No technical impossibility demonstrated

91 In point iii., you claim that radiolabelling of dyes is technically challenging. ECHA understands that you may have sought adaptation of the the information requirement by claiming that testing is technically not possible, under Section 2 of Annex XI.

92 However, you have not provided any substance-specific information about technical difficulties impacting the testing of the Substance. Further, in your comments to the draft decision, you refer to 'a poster presentation at SETAC Europe Annual Meeting 2022' that may discuss difficulties to create a stable radioisotope of dyes, but you have not provided this publication in your dossier or the comments.

93 On this basis, your justification is rejected.

3.4.1.4. Your justification to omit the study has no legal basis

94 A registrant may only adapt this information requirement based on the general rules set out in Annex XI or the specific rules set out in Annex IX, Section 9.2.1.2., Column 2.

95 Your justification to omit this information under point iv. does not refer to any legal ground for adaptation under Annex XI to REACH or Annex IX, Section 9.2.1.2., Column 2.

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

97 Further, ECHA acknowledges your intention to submit a testing proposal for sediment toxicity testing as part of a future dossier update. However, as indicated in your comments, this strategy relies on a testing proposal which is yet to be submitted. Therefore, no conclusion on the proposal can be made.

98 Based on the above, the information requirement is not fulfilled.

3.5. Study design and test specifications

99 Simulation degradation studies must include two types of investigations (Guidance on IRs and CSA, Section R.7.9.4.1.):

1) a degradation pathway study where transformation/degradation products are quantified and, if relevant, are identified, and

2) a kinetic study where the degradation rate constants (and degradation half-lives) of the parent substance and of relevant transformation/degradation products are experimentally determined.

100 You must perform the test, by following the pelagic test option with natural surface water containing approximately 15 mg dw/L of suspended solids (acceptable concentration between 10 and 20 mg dw/L) (Guidance on IRs and CSA, Section R.11.4.1.1.3.).

101 The required test temperature is 12°C, which corresponds to the average environmental temperature for the EU (Guidance on IRs and CSA, Table R.16-8) and is in line with the applicable test conditions of the OECD TG 309.

102 As specified in Guidance on IRs and CSA, Section R.7.9.4.1., the organic carbon (OC) concentration in surface water simulation tests is typically 2 to 3 orders of magnitude higher than the test material concentration and the formation of non-extractable residues (NERs) may be significant in surface water tests. Paragraph 52 of the OECD TG 309 provides that the "total recovery (mass balance) at the end of the experiment should be between 90% and 110% for radiolabelled substances, whereas the initial recovery at the beginning of the experiment should be between 70% and 110% for non-labelled substances". NERs contribute towards the total recovery. Therefore, the quantity of the (total) NERs must be accounted for the total recovery (mass balance), when relevant, to achieve the objectives of the OECD TG 309 to derive degradation rate and half-life. The reporting of results must include a scientific justification of the used extraction procedures and solvents.

103 For the persistence assessment by default, total NERs is regarded as non-degraded Substance. However, if reasonably justified and analytically demonstrated a certain part of

NERs may be differentiated and quantified as irreversibly bound or as degraded to biogenic NERs, such fractions could be regarded as removed when calculating the degradation half-life(s) (Guidance on IRs and CSA, Section R.11.4.1.1.3.). Further recommendations may be found in the background note on options to address non-extractable residues in regulatory persistence assessment available on the ECHA website (NER - summary 2019 (europa.eu)).

104 Relevant transformation/degradation products are at least those detected at ≥ 10% of the applied dose at any sampling time or those that are continuously increasing during the study even if their concentrations do not exceed 10% of the applied dose, as this may indicate persistence (OECD TG 309; Guidance on IRs and CSA, Section R.11.4.1.).

4. Identification of degradation products

105 Further degradation testing must be considered if the chemical safety assessment (CSA) according to Annex I indicates the need to investigate further the degradation of the substance (Annex VIII, Section 9.2., Column 2).

4.1. Triggering of the information requirement

106 This information requirement is triggered in case the chemical safety assessment (CSA) indicates the need for further degradation investigation (Annex I, Section 4; Annex XIII, Section 2.1), such as if the substance is a potential PBT/vPvB substance (Guidance on IRs and CSA, Section R.11.4.).

107 As already explained in Request 4, the Substance is a potential PBT/vPvB substance.

108 Therefore, the chemical safety assessment (CSA) indicates the need for further degradation investigation.

109 Your registration dossier does not include any information on degradation products identity. Therefore, the information requirement is not fulfilled.

4.2. Information provided to meet the identification of degradation products information requirement in your comments to the draft decision

110 In the comments to the draft decision, you have provided the following information:

i. You argue that the environmental releases of the Substance are negligible.

ii. You indicate your intention to adapt the information requirement by submitting QSAR. You propose to follow a tiered approach, in which you first identify the potential biodegradation products of the substance using an appropriate QSAR model (you mention the EAWAG-BBD Pathway Prediction System as an example) and then screen the PBT properties of the potential biodegradation products using appropriate QSAR models.

4.3. Assessment of the information provided

111 ECHA understands that regarding point i., you may have sought adaptation of the the information requirement by means of substance-tailored exposure-driven testing, under Section 3 of Annex XI.

112 As explained above in Section 0.2 of this decision, your adaptation under Annex XI, Section 3 is rejected.

113 ECHA understands regarding point ii. that you may have sought adaptation of the the information requirement by means of qualitative or quantitative structure-activity relationship models ((Q)SARs), under Section 1.3 of Annex XI.

114 ECHA acknowledges your intention to submit a new adaptation as part of a future dossier update. However, as indicated in your comments, this strategy relies essentially on data which is yet to be generated, therefore no conclusion on the compliance can currently be made.

4.4. Study design and test specifications

115 Regarding the selection of appropriate and suitable test method(s), the method(s) will have to be substance-specific. Identity, stability, behaviour, and molar quantity of the degradation/transformation products relative to the Substance must be evaluated and reported, when analytically possible. In addition, degradation half-life, log K_{ow} and potential toxicity of the transformation/degradation may need to be investigated. You may obtain this information from the degradation study requested in Request 4 or by some other measure. If any other method is used for the identification of the transformation/degradation products, you must provide a scientifically valid justification for the chosen method.

116 To determine the degradation rate of the Substance, the requested study according to OECD TG 309 (Request 3) must be conducted at 12°C and at a test concentration < 100 µg/L. However, to overcome potential analytical limitations with the identification and quantification of major transformation/degradation products, you may consider running a parallel test at higher temperature (but within the frame provided by the test guideline, e.g. 20°C) and at higher application rate (i.e. > 100 µg/L).

117 You may also use other appropriate and suitable test method(s) to provide information on the identity of the transformation/degradation products, for example an enhanced screening level degradation test or modelling tools. You will need to provide a scientifically valid justification for the chosen method. The provided information should include, identification, stability, behaviour, molar quantity of transformation/degradation products relative to the parent compound. In addition, degradation half-life, log K_{ow} and potential toxicity of the transformation/degradation may need to be investigated.

References

The following documents may have been cited in the decision.

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

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

Guidance on data-sharing; ECHA (2017).

All Guidance on REACH is available online: https://echa.europa.eu/guidance-documents/guidance-on-reach

Read-across assessment framework (RAAF)

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

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

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

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

Appendix 2: Procedure

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

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

The compliance check was initiated on 06 April 2022.

ECHA notified you of the draft decision and invited you to provide comments. You have provided comments during the decision-making phase which were found to address the incompliance identified in the draft decision. This information is also available in your dossier. Therefore the original request on an in vitro gene mutation study in mammalian cells was removed.

ECHA took into account your comments and amended the request(s).

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 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: Addressees of this decision and their corresponding information requirements

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

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

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

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

Appendix 4: Conducting and reporting new tests for REACH purposes

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

1.1. Test methods, GLP requirements and reporting

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

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

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

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

1.2. Test material

(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 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.

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

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

2. General recommendations for conducting and reporting new tests

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