

Decision number: CCH-D-2114289085-42-01/F

Helsinki, 25 November 2014

DECISION ON A COMPLIANCE CHECK OF A REGISTRATION PURSUANT TO ARTICLE 41(3) OF REGULATION (EC) NO 1907/2006**For Sulfonic acids, C10-21-alkane, Ph esters, CAS No 91082-17-6 (EC No 293-728-5), registration number: [REDACTED]****Addressee:** [REDACTED]

The European Chemicals Agency (ECHA) has taken the following decision in accordance with the procedure set out in Articles 50 and 51 of Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation).

I. Procedure

Pursuant to Article 41(1) of the REACH Regulation ECHA has performed a compliance check of the registration for Sulfonic acids, C10-21-alkane, Ph esters, CAS No 91082-17-6 (EC No 293-728-5), submitted by [REDACTED] (Registrant). The scope of this compliance check decision is limited to the standard information requirements of Sections 9.4 of Annexes IX and X of the REACH Regulation relating to terrestrial toxicity. ECHA stresses that it has not checked the information provided by the Registrant for compliance with requirements regarding the identification of the substance (Section 2 of Annex VI).

This decision is based on the registration as submitted with submission number [REDACTED], for the tonnage band of 1000 tonnes or more per year. This decision does not take into account any updates submitted after 4 September 2014, the date upon which ECHA notified its draft decision to the Competent Authorities of the Member States pursuant to Article 51(1) of the REACH Regulation.

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

The compliance check was initiated on 31 March 2014.

On 11 July 2014 ECHA sent the draft decision to the Registrant and invited him to provide comments within 30 days of the receipt of the draft decision.

On 14 August 2014 ECHA received comments from the Registrant on the draft decision.

The ECHA Secretariat considered the Registrant's comments. The information is reflected in the Statement of Reasons (Section III) whereas no amendments to the Information Required (Section II) were made.

On 4 September 2014 ECHA notified the Competent Authorities of the Member States of its draft decision and invited them pursuant to Article 51(1) of the REACH Regulation to submit proposals for amendment of the draft decision within 30 days of the receipt of the notification.

As no proposal for amendment was submitted, ECHA took the decision pursuant to Article 51(3) of the REACH Regulation.

II. Information required

A. Information in the technical dossier regarding effects on terrestrial organisms

Pursuant to Articles 41(1), 41(3), 10(a)(vii), 12(1)(e), 13 and Annexes IX and X of the REACH Regulation the Registrant shall submit the following information using the indicated test methods and the registered substance subject to the present decision:

1. Long-term toxicity testing on terrestrial invertebrates (Annex X, 9.4.4.; test method: Earthworm reproduction test (*Eisenia fetida*/*Eisenia andrei*), OECD 222, or Enchytraeid reproduction test, OECD 220, or Collembolan reproduction test in soil, OECD 232);
2. Long-term toxicity testing on plants (Annex X, 9.4.6.; test method: Terrestrial Plant Test: Seedling Emergence and Seedling Growth, OECD 208, with at least six species tested (with as a minimum two monocotyledonous species and four dicotyledonous species), or Soil Quality – Biological Methods – Chronic toxicity in higher plants, ISO 22030); and
3. Effects on soil micro-organisms (Annex IX, 9.4.2.; test method: Soil microorganisms: nitrogen transformation test, EU C.21./OECD 216).

Pursuant to Articles 41(1), 41(3), 10(b) and 14 as well as Annex I of the REACH Regulation, once the results of the above long-term terrestrial studies are available to the Registrant, he shall revise the chemical safety assessment as necessary according to Annex I of the REACH Regulation, including an updated derivation of the terrestrial PNEC.

B. Deadline for submitting the required information

Pursuant to Articles 41(4) and 22(2) of the REACH Regulation the Registrant shall submit the information required by this decision in the form of an updated registration to ECHA by **1 June 2016**. The timeline has been set to allow for sequential testing as appropriate.

C. Note for consideration by the Registrant

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

Failure to comply with the requests in this decision, or to fulfil otherwise the information requirements with a valid and documented adaptation, will result in a notification to the Authorities of the Member States for enforcement.

III. Statement of reasons

Pursuant to Article 41(3) of the REACH Regulation, ECHA may require the Registrant to submit any information needed to bring the registration into compliance with the relevant information requirements.

Pursuant to Articles 10(a)(vii), 12(1)(e) of the REACH Regulation, a technical dossier for a substance manufactured or imported by the Registrant in quantities of 1000 tonnes or more per year shall contain as a minimum the information specified in Annexes VII, VIII, IX, and X of the REACH Regulation.

"Effects on terrestrial organisms" is a standard information requirement as laid down in Annexes IX and X, Section 9.4., of the REACH Regulation. Adequate information on effects on soil micro-organisms (Annex IX, section 9.4.2.), short-term toxicity testing on invertebrates (Annex IX, section 9.4.1.), long-term toxicity testing on invertebrates (Annex X, section 9.4.4.), short-term toxicity testing on plants (Annex IX, section 9.4.3.) and long-term toxicity testing on plants (Annex X, section 9.4.6.) needs to be present in the technical dossier for the registered substance to meet the information requirements.

1. Terrestrial Invertebrates (Annex IX, 9.4.1. and Annex X, 9.4.4.)

Toxicity to terrestrial invertebrates is a standard information requirement under Annex IX, 9.4.1. and Annex X, 9.4.4. of the REACH Regulation. The registration dossier does not contain data for these endpoints. Instead, the Registrant has proposed to adapt short- and long-term toxicity testing on effects on terrestrial invertebrates using the following justification:

"No data are available to evaluate the toxicity of sulfonic acids, C10-21-alkane, Ph esters to soil macroorganisms. Despite the Annex IX of the REACH regulation recommends the application of the equilibrium partitioning method in the absence of toxicity data for soil organisms, the so derived PNEC would only be a theoretical value as a PEC_{soil} is not required. Therefore, the risk characterization can be based on a qualitative assessment of substance properties rather than a quantitative assessment based on concentrations. Sulfonic acids, C10-21-alkane, Ph esters is characterized by the following properties:

- No acute aquatic effects towards algae, daphnids and fish at concentrations up to the water solubility were observed. Assuming a similar sensitivity of aquatic and terrestrial organisms there is no evidence that the substance exhibits adverse effects towards terrestrial species.*
- With a upper BCF of 212 (experimentally determined), the substance has only a low potential for bioaccumulation, which is supported by its logK_{ow} values up to 11.3.*
- The substance can be degraded biotically. There is no evidence that it will persist in the environment, thus lowering the possibility of accumulation in soil itself as well as in biota.*
- In the case of sulfonic acids, C10-21-alkane, Ph esters, exposure to the terrestrial compartment will only result from indirect pathways via emissions to air or waste water. Due to the low vapour pressure of the substance, exposure via the air can be excluded leaving emissions to waste water as sole exposure pathway. The indirect exposure of the soil compartment via this pathway is not expected to result in an unacceptable level of risk for the terrestrial compartment.*

Summarizing these characteristics, the substance has neither to be classified as dangerous for the environment, nor holds PBT-properties. There is no evidence that sulfonic acids, C10-21-alkane, Ph esters is toxic towards soil organisms requiring the performance of specific toxicity tests towards terrestrial arthropods.

As the substance is neither considered as persistent, nor as very persistent, long-term testing towards terrestrial arthropods is scientifically not justified as well."

In his proposed adaptation the Registrant argues that based on substance characteristics soil testing is not required. However, ECHA considers that the adaptation is not justified for the following reasons;

- First, the Registrant argues that no toxicity was observed in acute aquatic studies up to the solubility limit and that a similar sensitivity can be assumed for terrestrial organisms. ECHA points out that the *ECHA Guidance on information requirements and chemical safety assessment* (version 1.1., November 2012), Chapter R.7c p. 124 indicates that "The absence of chronic or long-term effects in aquatic organisms up to the substance solubility limit, or of acute effects within the solubility range above 10 mg/l can be used as part of a Weight of Evidence argument to modify/waive the data requirements of Annex IX and X". ECHA notices that no long-term studies to fish or daphnia are available in the technical dossier and that the water solubility is reported to be 2.2 mg/l.
- Second, the Registrant argues that the substance has only a low potential for bioaccumulation and refers to a fish bioconcentration study. ECHA points out that also for aquatic organisms the lack of a high bioaccumulation potential does not necessarily imply lack of toxicity to aquatic organisms (*ECHA Guidance on information requirements and chemical safety assessment* (version 1.2., November 2012, Chapter R.7b p. 41).
- Third, the Registrant argues that the substance can be degraded biotically. ECHA notices that based on the information in the technical dossier the substance cannot be classified as readily biodegradable. As no appropriate half-life in soil is provided, and in relation to section R.7.11.6., Chapter R.7c of the *ECHA Guidance on information requirements and chemical safety assessment* (version 1.1., November 2012), it could be considered that there is indication that the substance is highly persistent in soil.
- Last, the Registrant argues that the indirect exposure of the soil compartment is not expected to result in an unacceptable level of risk. ECHA, however, notices that the Registrant has not provided an exposure assessment to support this statement and thus the conditions of Annex XI section 3 are not fulfilled.

As explained above, the information available on these endpoints for the registered substance in the technical dossier does not meet the information requirements. Consequently there is an information gap and it is necessary to provide information for short- and long-term toxicity on terrestrial invertebrates.

Furthermore, ECHA notes that according to section R.7.11.5.3., Chapter R.7c of the ECHA *Guidance on information requirements and chemical safety assessment* (version 1.1, November 2012), substances that have a log Kow >5 are considered highly adsorptive. According to the evidence presented within the Registration dossier, the substance has a high potential to adsorb to soil (log Kow 5.7-11.3). In addition, as explained above, there are indications that the substance is highly persistent in soil. Based on the indications for high adsorption and high persistence in soil, ECHA notes that even if the substance was only registered at a tonnage of 100 to 1000 tonnes, long-term testing instead of short-term testing should have been considered.

The earthworm reproduction test (OECD 222), Enchytraeid reproduction test (OECD 220), and Collembolan reproduction test (OECD 232) are each considered capable of generating information appropriate for the fulfilment of the information requirements for long-term toxicity testing to terrestrial invertebrates. Each of these tests is suitable to also address the information requirement of Annex IX, section 9.4.1., as specified above. ECHA is not in a position to determine the most appropriate test protocol, since this decision is dependent upon species sensitivity and substance properties.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, the Registrant is requested to submit the following information derived with the registered substance subject to the present decision:

Earthworm reproduction test (*Eisenia fetida*/*Eisenia andrei*) (test method: OECD 222), or Enchytraeid reproduction test (test method: OECD 220), or Collembolan reproduction test in soil (test method: OECD 232).

2. Toxicity testing on terrestrial plants (Annex IX, 9.4.3. and Annex X, 9.4.6)

Toxicity to terrestrial plants is a standard information requirement under Annex IX, 9.4.3. and Annex X, 9.4.6. of the REACH Regulation. The registration dossier does not contain data for these endpoints. Instead, the Registrant has proposed to adapt short- and long-term toxicity testing on effects on terrestrial plants using the following justification:

"No data are available to evaluate the toxicity of sulfonic acids, C10-21-alkane, Ph esters to terrestrial plants. Despite the Annex IX of the REACH regulation recommends the application of the equilibrium partitioning method in the absence of toxicity data for soil organisms, the so derived PNEC would only be a theoretical value as a PECsoil is not required. Therefore, the risk characterization can be based on a qualitative assessment of substance properties rather than a quantitative assessment based on concentrations. Sulfonic acids, C10-21-alkane, Ph esters is characterized by the following properties:

- *No acute aquatic effects towards algae, daphnids and fish at concentrations up to the water solubility were observed. Assuming a similar sensitivity of aquatic and terrestrial organisms there is no evidence that the substance exhibits adverse effects towards terrestrial species.*
- *With a upper BCF of 212 (experimentally determined), the substance has only a low potential for bioaccumulation, which is supported by its logKow values up to 11.3.*
- *The substance can be degraded biotically. There is no evidence that it will persist in the environment, thus lowering the possibility of accumulation in soil itself as well as in biota.*
- *In the case of sulfonic acids, C10-21-alkane, Ph esters, exposure to the terrestrial compartment will only result from indirect pathways via emissions to air or waste water. Due to the low vapour pressure of the substance, exposure via the air can be excluded*

leaving emissions to waste water as sole exposure pathway. The indirect exposure of the soil compartment via this pathway is not expected to result in an unacceptable level of risk for the terrestrial compartment.

Summarizing these characteristics, the substance has neither to be classified as dangerous for the environment, nor holds PBT-properties. There is no evidence that sulfonic acids, C10-21-alkane, Ph esters is toxic towards soil organisms requiring the performance of specific toxicity tests towards terrestrial plants.

As the substance is neither considered as persistent, nor as very persistent, long-term testing towards terrestrial arthropods is scientifically not justified as well."

As it is explained above under III.1., the information available on these endpoints for the registered substance in the technical dossier does not meet the information requirements. Consequently there is an information gap and it is necessary to provide information for short- and long-term toxicity on terrestrial plants.

Both the Terrestrial plants, growth test (OECD 208, in the configuration as explained below) and the Soil Quality – Biological Methods – Chronic toxicity in higher plants (ISO 22030) are considered capable of generating information appropriate for the fulfilment of the information requirement for long-term toxicity testing on plants. Each of these tests is suitable to also address the information requirement of Annex IX, section 9.4.3., as specified above. ECHA is not in a position to determine the most appropriate test protocol, since this decision is dependent upon species sensitivity and substance properties.

OECD guideline 208 (Terrestrial Plant Test: Seedling Emergence and Seedling Growth) considers the need to select the number of test species according to relevant regulatory requirements, and the need for a reasonably broad selection of species to account for interspecies sensitivity distribution. For long-term toxicity testing, ECHA considers six species as the minimum to achieve a reasonably broad selection. The long-term toxicity testing shall be conducted with species from different families, as a minimum with two monocotyledonous species and four dicotyledonous species, selected according to the criteria indicated in the OECD 208 guideline. The Registrant should consider if testing on additional species is required to cover the information requirement.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, the Registrant is requested to submit the following information derived with the registered substance subject to the present decision:

Terrestrial Plant Test: Seedling Emergence and Seedling Growth (test method: OECD 208), with at least six species tested (with as a minimum two monocotyledonous species and four dicotyledonous species), or Soil Quality – Biological Methods – Chronic toxicity in higher plants (test method: ISO 22030).

3. Soil micro-organisms (Annex IX, section 9.4.2.)

The hazard to soil microbial communities is a standard information requirement under Annex IX, section 9.4.2. of the REACH Regulation. The registration dossier does not contain data for this endpoint. Instead, the Registrant has proposed to adapt testing on effects on soil microorganisms using the following justification:

"According to Annex XI, Section 1 of the REACH regulation, a test does not need to be conducted as it is scientifically not necessary. Sulfonic acids, C10-21-alkane, Ph esters did not affect the microbial activity of sewage sludge at concentrations of 10 g/L (nominal). As there are no indications of a higher sensitivity, no adverse effects towards soil microorganisms are expected."

The Registrant proposes that testing can be waived based on the lack of effects to the microbial activity of sewage sludge. ECHA acknowledges that the ECHA Guidance Chapter R.7c, p. 125 indicates that a positive result in the sewage sludge microbial toxicity test is a trigger for soil microbial testing. However, a negative result in the sewage sludge microbial toxicity test should not be used in isolation to conclude that soil microorganisms would not be affected by the substance. Consequently there is an information gap and it is necessary to provide information for the present endpoint.

According to ECHA *Guidance on information requirements and chemical safety assessment* (version 1.1, November 2012), Chapter R.7C, Section R.7.11.3.1., p115, the nitrogen transformation test is considered sufficient for most non-agrochemicals.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, the Registrant is requested to submit the following information derived with the registered substance subject to the present decision:

Soil microorganisms: nitrogen transformation test (test method: EU C.21./OECD 216).

4. Notes for consideration by the Registrant:

As stated above, based on the information currently available in the technical dossier on physio-chemical properties and environmental fate, and in relation to section R.7.11.6., Chapter R.7c of the ECHA *Guidance on information requirements and chemical safety assessment* (version 1.1., November 2012), ECHA considers that there are indications of high adsorption and high persistence of the substance in soil. In the context of an integrated testing strategy for soil toxicity, the Guidance advocates performing an initial screening assessment based upon the Equilibrium Partitioning Method (EPM), together with a confirmatory long-term soil toxicity test. This means that once the results of one of the requested long-term soil toxicity tests ((1) or (2) above) as well as the results from the toxicity test on soil microorganisms ((3) above) have become available the Registrant may be able to justify an adaptation of the other requested long-term soil toxicity test ((1) or (2) above). Specifically he could examine whether or not screening assessment based on Predicted No Effect Concentration (PNEC) for soil organisms (derived by using Equilibrium Partitioning Method (EPM)) with additional safety factor of 10 applied indicates the risk to soil compartment when compared to relevant environmental concentrations in soil and whether or not performed toxicity tests with terrestrial organisms indicate a risk to the tested organisms. If the Registrant concludes that no further investigation of effects on terrestrial organisms is required, he should update his technical dossier by clearly arguing why – out of weight of evidence considerations – taking into account the new information it is justified to adapt the information requirement for the second long-term soil toxicity test.

ECHA emphasises that the intrinsic properties of soil microbial communities are not addressed through the EPM extrapolation method. Therefore the potential weight of evidence adaptation possibility outlined in the Guidance (based on EPM and other data that is available for the substance) does not apply for the endpoint of Annex IX, Section 9.4.2.

In his comments to the draft decision, the Registrant indicated a strategy approach and proposed to update the exposure assessment for the substance to demonstrate that direct or indirect exposure to the soil compartment is unlikely. Due to the extensive work involved in the strategy approach, the Registrant indicated that they would be able to update the dossier 2 months after receiving the final decision.

ECHA notes that as at this stage the Registrant's strategy is only reflected in the comments with no specific details on the proposed strategy and as no justified adaptation has been provided, there are still information gaps for the three terrestrial endpoints and therefore no changes were made to the information requests. As indicated in Section II.C., the Registrant retains the right to adapt information requirements addressed in the decision, if such adaptations can be justified.

IV. Adequate identification of the composition of the tested material

ECHA stresses that the information submitted for identifying the substance has not been checked for compliance with the substance identity requirements set out in Section 2 of Annex VI of the REACH Regulation. The Registrant is reminded of his responsibility to ensure that his registration covers one substance only and that the substance is correctly identified in accordance with Annex VI, Section 2 of the REACH Regulation.

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

Furthermore, there must be adequate information on substance identity for the sample tested and the grade(s) registered to enable the relevance of the studies to be assessed.

V. Information on right to appeal

An appeal may be brought against this decision to the Board of Appeal of ECHA under Article 51(8) of the REACH Regulation. Such an appeal shall be lodged within three months of receiving notification of this decision. Further information on the appeal procedure can be found on ECHA's internet page at <http://www.echa.europa.eu/regulations/appeals>. The notice of appeal will be deemed to be filed only when the appeal fee has been paid.



Leena Ylä-Mononen
Director of Evaluation