Decision number: TPE-D-2114310510-71-01/F Helsinki, 19 November 2015

DECISION ON TESTING PROPOSAL(S) SET OUT IN A REGISTRATION PURSUANT TO ARTICLE 40(3) OF REGULATION (EC) NO 1907/2006

For Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine, EC No 605-296-0 (CAS No 162627-17-0), 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 40(1) of the REACH Regulation, ECHA has examined the following testing proposals submitted as part of the registration dossier in accordance with Articles 10(a)(ix) and 12(1)(d) thereof for Condensation products of dimerised fatty acids, C18-unsaturated, with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine, EC No 605-296-0 (CAS No 162627-17-0), submitted by [redacted] (Registrant).

- Repeated dose toxicity (OECD Guideline 408/EU Method B.26, Repeated Dose 90-Day Oral Toxicity in Rodents) in rats;
- Toxicity to reproduction (OECD Guideline 416, Two-Generation Reproduction Toxicity Study) in rats;
- Developmental toxicity / teratogenicity (OECD Guideline 414/EU Method B.31, Prenatal Developmental Toxicity Study) in rats;
- Toxicity to soil macroorganisms except arthropods (OECD Guideline 222, Earthworm Reproduction Test (Eisenia fetida/Eisenia andrei));
- Toxicity to terrestrial plants (OECD Guideline 208, Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test);
- Toxicity to soil microorganisms (OECD Guideline 216, Soil Microorganisms: Nitrogen Transformation Test).

This decision is based on the registration as submitted with submission number [redacted], for the tonnage band of 100 to 1000 tonnes per year. This decision does not take into account any updates after 22 July 2015, i.e. 30 calendar days after the end of the commenting period.

This decision does not imply that the information provided by the Registrant in his registration dossier is in compliance with the REACH requirements. The decision does not prevent ECHA from initiating a compliance check on the registration at a later stage.

ECHA received the registration dossier containing the above-mentioned testing proposals for further examination pursuant to Article 40(1) on 25 April 2013.

ECHA held a third party consultation for the testing proposals from 14 August 2014 until 28 September 2014. ECHA received information from third parties (see section III below).

On 13 May 2015 ECHA sent the draft decision to the Registrant and invited him to provide comments within 30 days of the receipt of the draft decision.

By 22 June 2015 the Registrant did not provide any comments on the draft decision to ECHA.

On 3 September 2015 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. Testing required

A. Tests required pursuant to Article 40(3)

The Registrant shall carry out the following proposed tests pursuant to Article 40(3)(a) and 13(4) of the REACH Regulation using the indicated test methods and the registered substance subject to the present decision:

1. Sub-chronic toxicity study (90-day), oral route (Annex IX, Section 8.6.2.; test method: EU B.26/OECD 408) in rats;
2. Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.; test method: EU B.31/OECD 414) in rats or rabbits, oral route;
3. Long-term toxicity to terrestrial invertebrates (Annex IX, 9.4.1., column 2; test method: OECD 222);
4. Effects on soil micro-organisms (Annex IX, 9.4.2.; test method: EU C.21/OECD 216).

The Registrant shall carry out the following modified test pursuant to Article 40(3)(b) and 13(4) of the REACH Regulation using the indicated test method and the registered substance subject to the present decision:

5. Long-term toxicity testing on plants (Annex IX, 9.4.3., column 2; test method: OECD 208), with at least six species tested (with as a minimum two monocotyledonous species and four dicotyledonous species)

while the originally proposed test for a toxicity to reproduction (OECD Guideline 416, Two-Generation Reproduction Toxicity Study) proposed to be carried out using the registered substance is rejected pursuant to Article 40(3)(d) of the REACH Regulation.

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 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 request(s) in this decision, or to fulfil otherwise the information requirement(s) with a valid and documented adaptation, will result in a notification to the Enforcement Authorities of the Member States.

B. Deadline for submitting the required information

Pursuant to Articles 40(4) and 22(2) of the REACH Regulation, the Registrant shall submit to ECHA by **27 November 2017** an update of the registration dossier containing the information required by this decision, including, where relevant, an update of the Chemical Safety Report. The timeline has been set to allow for sequential testing as appropriate.

III. Statement of reasons

The decision of ECHA is based on the examination of the testing proposals submitted by the Registrant for the registered substance and scientific information submitted by third parties.

A. Tests required pursuant to Article 40(3)

1. Sub-chronic toxicity study (90-day), oral route (Annex IX, Section 8.6.2.

a) Examination of the testing proposal

Pursuant to Article 40(3)(a) of the REACH Regulation, ECHA may require the Registrant to carry out the proposed test.

A sub-chronic toxicity study (90 day) is a standard information requirement as laid down in Annex IX, Section 8.6.2. of the REACH Regulation. The information on this endpoint is not available for the registered substance but needs to be present in the technical dossier to meet the information requirements. Consequently there is an information gap and it is necessary to provide information for this endpoint.

The Registrant has submitted a testing proposal for a sub-chronic toxicity study (90 day) in rats via the oral route (EU B.26/OECD 408) with the following justification: "*The conduct of a sub-chronic oral toxicity study (OECD 408) with WS400130 has been proposed as a follow-up study to the existing OECD 422 study for further clarification of the toxicologic hazard of WS400130 and to meet the requirements of Regulation (EC) 1907/2006, Annex IX, Section 8.6.2. In addition, the OECD 408 study should give an indication, whether or not a two-generation reproductive toxicity study (OECD 416) needs to be performed (Regulation 1907/2006/EC, Annex IX, Section 8.7.3).*"

The Registrant proposed testing by the oral route. In light of the physic-chemical properties of the substance, i.e. liquid with low vapour pressure, and the information provided on the uses and human exposure, i.e. "highly viscous liquid" with the relatively low concentrations of the substance in mixtures applied via spraying (app. [redacted] %), ECHA considers that testing by the oral route is most appropriate. Therefore, ECHA considers that the proposed study via the oral route is appropriate to fulfil the information requirement of Annex IX, Section 8.6.2. of the REACH Regulation because the proposed route is the most appropriate route of administration having regard to the likely route of human exposure.

The Registrant proposed testing in rats. According to the test method EU B.26/OECD 408 the rat is the preferred species. ECHA considers this species as being appropriate and testing should be performed with the rat.

b) Outcome

Therefore, pursuant to Article 40(3)(a) of the REACH Regulation, the Registrant is requested to carry out the proposed study with the registered substance subject to the present decision: Sub-chronic toxicity study (90-day) in rats, oral route (test method: EU B.26/OECD 408).

2. Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.)

a) Examination of the testing proposal

Pursuant to Article 40(3)(a) of the REACH Regulation, ECHA may require the Registrant to carry out the proposed test.

A pre-natal developmental toxicity study for a first species is a standard information requirement as laid down in Annex IX, Section 8.7.2. of the REACH Regulation. The information on this endpoint is not available for the registered substance but needs to be present in the technical dossier to meet the information requirements. Consequently there is an information gap and it is necessary to provide information for this endpoint.

The Registrant has submitted a testing proposal for a pre-natal developmental toxicity study in rats according to EU B.31/OECD 414.

ECHA considers that the proposed study is appropriate to fulfil the information requirement of Annex IX, Section 8.7.2. of the REACH Regulation.

The Registrant proposed testing in rats. He did not specify the route for testing. According to the test method EU B.31/OECD 414, the rat is the preferred rodent species, the rabbit the preferred non-rodent species and the test substance is usually administered orally. ECHA considers these default parameters appropriate and testing should be performed by the oral route with the rat or the rabbit as a first species to be used.

b) Outcome

Therefore, pursuant to Article 40(3)(a) of the REACH Regulation, the Registrant is requested to carry out the proposed study with the registered substance subject to the present decision: Pre-natal developmental toxicity study in rats or rabbits, oral route (test method: EU B.31/OECD 414).

3. Long-term toxicity to terrestrial invertebrates (Annex IX, 9.4.1., column 2)

a) Examination of the testing proposal

Pursuant to Article 40(3)(a) of the REACH Regulation, ECHA may require the Registrant to carry out the proposed test.

The Registrant must address the standard information requirements set out in Annex IX, section 9.4., for different taxonomic groups: effects on soil micro-organisms (Annex IX, section 9.4.2.), short-term toxicity testing on invertebrates (Annex IX, section 9.4.1.), and short-term toxicity testing on plants (Annex IX, section 9.4.3.). Column 2 of section 9.4 of Annex IX specifies that long-term toxicity testing shall be considered by the Registrant

instead of short-term, in particular for substances that have a high potential to adsorb to soil or that are very persistent.

The information on toxicity to terrestrial invertebrates is not available for the registered substance but needs to be present in the technical dossier to meet the information requirements. Consequently there is an information gap and it is necessary to provide information for the short-term toxicity testing on invertebrates (Annex IX, section 9.4.1.).

The Registrant proposed a long-term toxicity test on terrestrial invertebrates (OECD Guideline 222, Earthworm Reproduction Test (Eisenia fetida/Eisenia andrei)), with the following justification: *"According to Annex IX of the REACH Regulation performance of a short-term toxicity study in invertebrates is requested. Since the UVCB substance is not readily biodegradable and has a low water solubility it is proposed to perform a long-term study in earthworms. This test will cover exposure to the test substance via soil pore water, surface contact of worm with soil matrix as well as via ingestion of soil particles."*

According to section R.7.11.5.3., Chapter R.7c of the ECHA *Guidance on information requirements and chemical safety assessment* (version 2.0, November 2014), substances that are ionisable or have a log K_{ow}/K_{oc} >5 are considered highly adsorptive, whereas substances with a half-life >180 days are considered very persistent in soil. According to the evidence presented within the Registration dossier, the substance has a high potential to adsorb to soil ($logK_{oc}$ >5.6 at 25 °C/pH4 and, as noted by the Registrant, the individual constituents of the substance contain ionisable groups) and is likely to be very persistent which is default setting for not readily biodegradable substances, when value of the half-life in soil is not available and therefore ECHA agrees that long-term testing is indicated (Column 2 of Section 9.4. of Annex IX). The proposed test is suitable to address the information requirement of Annex IX, section 9.4.1.

b) Outcome

Therefore, pursuant to Article 40(3)(a) of the REACH Regulation, the Registrant is required to carry out the proposed study using the registered substance subject to the present decision: Earthworm reproduction test (*Eisenia fetida/Eisenia andrei*) (test method: OECD 222).

4. Effects on soil micro-organisms (Annex IX, 9.4.2.)

a) Examination of the testing proposal

Pursuant to Article 40(3)(a) of the REACH Regulation, ECHA may require the Registrant to carry out the proposed test.

The Registrant must address the standard information requirements set out in Annex IX, section 9.4., for different taxonomic groups: effects on soil micro-organisms (Annex IX, section 9.4.2.), short-term toxicity testing on invertebrates (Annex IX, section 9.4.1.), and short-term toxicity testing on plants (Annex IX, section 9.4.3.).

The information on effects on soil micro-organisms is not available for the registered substance but needs to be present in the technical dossier to meet the information requirements. Consequently there is an information gap and it is necessary to provide information for effects on soil micro-organisms (Annex IX, section 9.4.2.).

The Registrant proposed a toxicity test on soil micro-organisms (OECD Guideline 216, Soil Microorganisms: Nitrogen Transformation Test). ECHA concludes that the proposed test is suitable to address the information requirement of Annex IX, section 9.4.2.

b) Outcome

Therefore, pursuant to Article 40(3)(a) of the REACH Regulation, the Registrant is required to carry out the proposed study using the registered substance subject to the present decision: Soil microorganisms: nitrogen transformation test (test method: EU C.21/OECD 216).

5. Long-term toxicity testing on plants (Annex IX, 9.4.3., column 2)

a) Examination of the testing proposal

Pursuant to Article 40(3)(b) of the REACH Regulation, ECHA may require the Registrant to carry out the proposed test under modified conditions.

The Registrant must address the standard information requirements set out in Annex IX, section 9.4., for different taxonomic groups: effects on soil micro-organisms (Annex IX, section 9.4.2.), short-term toxicity testing on invertebrates (Annex IX, section 9.4.1.), and short-term toxicity testing on plants (Annex IX, section 9.4.3.). Column 2 of section 9.4 of Annex IX specifies that long-term toxicity testing shall be considered by the Registrant instead of short-term, in particular for substances that have a high potential to adsorb to soil or that are very persistent.

The information on toxicity testing on plants is not available for the registered substance but needs to be present in the technical dossier to meet the information requirements. Consequently there is an information gap and it is necessary to provide information for the short-term toxicity testing on plants (Annex IX, section 9.4.3.).

The Registrant proposed toxicity test on terrestrial plants (OECD 208). According to section R.7.11.5.3., Chapter R.7c of the ECHA *Guidance on information requirements and chemical safety assessment* (version 2.0, November 2014), substances that are ionisable or have a log K_{ow}/K_{oc} >5 are considered highly adsorptive, whereas substances with a half-life >180 days are considered very persistent in soil. According to the evidence presented within the Registration dossier, the substance has a high potential to adsorb to soil ($logK_{oc}$ >5.6 at 25 °C/pH4 and, as noted by the Registrant, the individual constituents of the substance contain ionisable groups) and is likely to be very persistent which is default setting for not readily biodegradable substances, when value of the half-life in soil is not available and therefore meets the column 2 adaptation criteria of Annex IX, section 9.4. concerning the use of long-term testing instead of short-term. Therefore, considering the properties of the substance, ECHA concludes that only a long-term toxicity test on plants (and not the short-term) will provide the necessary useful information.

OECD guideline 208 (Terrestrial plants, growth test) 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. 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.

b) Outcome

Therefore, pursuant to Article 40(3)(b) of the REACH Regulation, the Registrant is required to carry out the proposed study under modified conditions using the registered substance subject to the present decision: Terrestrial plants, growth test (test method: OECD 208), with at least six species tested (with as a minimum two monocotyledonous species and four dicotyledonous species).

6. Two-generation reproductive toxicity study (Annex IX, Section 8.7.3.)

a) Examination of the testing proposal

Pursuant to Article 40(3)(d) of the REACH Regulation, ECHA may reject a proposed test.

The Registrant has submitted a testing proposal for a two-generation reproductive toxicity study according to OECD 416. More specifically, in IUCLID section 7.8.1 of the technical dossier, the Registrant had selected "experimental study planned" indicating that the study is to be performed according to above-mentioned test guideline OECD 416, and with the following note provided: *"In the reproductive toxicity screening test no adverse effects were observed. Only if there were adverse effects on reproductive organs or tissues in the proposed 90 -day toxicity study a 2 -generation reproductive toxicity study will be proposed."*

According to Annex IX, Section 8.7.3., as amended by Commission Regulation (EU) 2015/282 (entered into force on 13 March 2015), an extended one-generation reproductive toxicity study is an information requirement if adverse effects on reproductive organs or tissues have been observed in the available repeated dose toxicity studies (e.g. a 28-day or 90-day repeated dose toxicity study, OECD 421 or 422 screening studies) or if they reveal other concerns in relation with reproductive toxicity.

ECHA notes that there are results of a Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test (OECD 422) available in the registration dossier that did not indicate adverse effects on reproductive organs or tissues.

ECHA observes further that although proposing "experimental study planned", the Registrant has included a note that two-generation reproductive toxicity study would be proposed only if it is trigerred by adverse effects in the proposed 90-day repeated dose toxicity study. ECHA considers that the proposed study is at this stage not necessary to fulfil the information requirement of Annex IX, Section 8.7.3. of the REACH Regulation because no 90-day repeated dose toxicity study is currently available to evaluate if performance of such a reproductive toxicity study is required at that tonnage level and no adverse effects on reproductive organs or tissues or other concerns in relation with reproductive toxicity have been observed in a Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test (OECD 422).

b) Consideration of the information received during third party consultation

ECHA received third party information concerning the testing proposal during the third party consultation.

A third party has indicated that the the proposed study is not a standard information requirement and in terms of animal welfare a sequential testing strategy which gives

priority to the proposed 90-day repeated dose toxicity study should be used. It means that the results of the proposed 90-day repeated dose toxicity study should be the basis to decide if a two-generation reproductive toxicity study is generally required. Furthermore, a third party noted that if further study on reproductive toxicity is triggered preferrably Extended One-Generation Reproductive Toxicity Study (EOGRTS) according to OECD 443 would be conducted for the registered substance.

For the reasons stated under section III.6.a above, ECHA has rejected the testing proposal for a two-generation reproductive toxicity study.

c) Outcome

ECHA concludes that there is at this stage no information gap for the standard information requirement of Annex IX, Section 8.7.3. Therefore, pursuant to Article 40(3)(d) of the REACH Regulation, the proposed test for a two-generation reproduction toxicity study (OECD 416) is rejected.

d) Notes for consideration by the Registrant

Once the results from the sub-chronic toxicity study (Section II, 1. above) are available, the Registrant should reconsider the information requirement of Annex IX, Section 8.7.3. If the sub-chronic toxicity study indicates adverse effects on reproductive organs or tissues or reveal other concerns in relation with reproductive toxicity, a new testing proposal for the present endpoint would – in accordance with the REACH Regulation – have to be submitted, unless compliance with this information requirement is scientifically justified and documented by means of specific or general rules of adaptation.

IV. Adequate identification of the composition of the tested material

The process of examination of testing proposals set out in Article 40 of the REACH Regulation aims at ensuring that the new studies meet real information needs. Within this context, the Registrant's dossier was sufficient to confirm the identity of the substance to the extent necessary for examination of the testing proposal. The Registrant must note, however, that this information has not been checked for compliance with the substance identity requirements set out in Section 2 of Annex VI of the REACH Regulation.

It is important to ensure that the particular sample of substance tested in the new studies 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 appeal shall be lodged within three months of receiving notification of this decision. Further information on the appeal procedure can be found on the 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.

Authorised[1] by Claudio Carlon, Head of Unit, Evaluation E2

[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.