EUROPEAN CHEMICALS AGENCY

Decision number: CCH-D-2114290590-48-01/F Helsinki, 12 December 2014

DECISION ON A COMPLIANCE CHECK OF A REGISTRATION PURSUANT TO ARTICLE 41(3) OF REGULATION (EC) NO 1907/2006

For Reaction mass of ((propane-2,2-diylbis(4,1-phenylene))bis(oxy))bis(2-hydroxypropane-3,1-diyl) bis(2-methylacrylate) and 1-hydroxy-3-(4-(2-(4-(2-hydroxy-3-(methacryloyloxy)propoxy)phenyl)propan-2-yl)phenoxy)propan-2-yl methacrylate, CAS No 36425-15-7 (EC No 500-089-0), 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 41(1) of the REACH Regulation ECHA has performed a compliance check of the registration for Reaction mass of ((propane-2,2-diylbis(4,1-phenylene))bis(oxy))bis(2-hydroxypropane-3,1-diyl) bis(2-methylacrylate) and 1-hydroxy-3-(4-(2-(4-(2-hydroxy-3-(methacryloyloxy)propoxy)phenyl)propan-2-yl)phenoxy)propan-2-yl methacrylate, CAS No 36425-15-7 (EC No 500-089-0), submitted by [redacted] (Registrant).

This decision is based on the registration as submitted with submission number [redacted], for the tonnage band of 1000 tonnes or more tonnes per year. This decision does not take into account any updates submitted after 24 July 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 18 September 2013.

On 8 January 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 7 February 2014 and 12 February 2014 ECHA received comments from the Registrant on the draft decision. On 23 May 2014 the Registrant updated his registration dossier with the submission number [redacted]

The ECHA Secretariat considered the Registrant's comments and update. On basis of this information, Section II was amended. The Statement of Reasons (Section III) was changed accordingly.

On 24 July 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.

Subsequently, proposals for amendment to the draft decision were submitted.

On 29 August 2014 ECHA notified the Registrant of the proposals for amendment to the draft decision and invited him pursuant to Article 51(5) of the REACH Regulation to provide comments on the proposals for amendment within 30 days of the receipt of the notification.

The ECHA Secretariat reviewed the proposals for amendment received and amended the draft decision.

The present decision relates solely to a compliance check requesting information in form of name or other identifier of the substance (Annex VI, 2.1.), composition of the substance (Annex VI, 2.3.), sub-chronic toxicity study (90-day) (Annex IX, 8.6.2) and pre-natal developmental toxicity study (Annex IX, 8.7.2.). The other information requirement for two-generation reproductive toxicity study (Annex X, Section 8.7.3.) is addressed in a separate decision although all endpoints were initially addressed together in the same draft decision.

On 8 September 2014 ECHA referred the draft decision to the Member State Committee.

By 29 September 2014, in accordance to Article 51(5), the Registrant provided comments on the proposals for amendment. The Member State Committee took the comments of the Registrant on the proposals for amendment into account.

A unanimous agreement of the Member State Committee on the draft decision relating to name or other identifier of the substance, composition of the substance, sub-chronic toxicity study (90-day) and pre-natal developmental toxicity study was reached on 13 October 2014 in a written procedure launched on 2 October 2014.

ECHA took the decision pursuant to Article 51(6) of the REACH Regulation.

II. Information required

A. Information in the technical dossier related to the identity of the substance

Pursuant to Articles 41(1), 41(3), 10(a)(ii) and Annex VI, Section 2 of the REACH Regulation the Registrant shall submit the following information for the registered substance subject to the present decision:

1. Name or other identifier of the substance (Annex VI, 2.1.), as specified in Section III.A.1 below;
2. Composition of the substance (Annex VI, 2.3.), as specified in Section III.A.2 below.

B. Information in the technical dossier derived from the application of Annexes VII to XI

Pursuant to Articles 41(1), 41(3), 10(a)(vi) and/or (vii), 12(1)(e), 13 and Annexes VII to XI 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. Sub-chronic toxicity study (90-day), oral route (Annex IX, 8.6.2.; test method: EU B.26./OECD 408) in rats;

2. Pre-natal developmental toxicity study (Annex IX, 8.7.2.; test method: EU B.31./OECD 414) in rats or rabbits, oral route.

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.

C. Deadline for submitting the information

Pursuant to Article 41(4) of the REACH Regulation the Registrant shall submit the information in the form of an updated registration to ECHA by **19 December 2016**.

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.

A. Information in the technical dossier related to the identity of the substance

Pursuant to Article 10(a)(ii) of the REACH Regulation, the technical dossier shall contain information on the identity of the substance as specified in Annex VI, Section 2 of the REACH Regulation. In accordance with Annex VI, Section 2 the information provided shall be sufficient to enable the identification of the registered substance.

1. Name or other identifier of the substance (Annex VI, 2.1)

ECHA notes that the Registrant did not provide sufficient and appropriate information on name or other identifier of the substance required to be provided according to Annex VI, Section 2. 1. of the REACH Regulation.

The Registrant has indicated the substance type to be multi-constituent and provided the following chemical name for the substance in the IUPAC name field "Reaction mass of ((propane-2,2-diylbis(4,1-phenylene))bis(oxy))bis(2-hydroxypropane-3,1-diyl) bis(2-methylacrylate) and 1-hydroxy-3-(4-(2-(4-(2-hydroxy-3-(methacryloyloxy)propoxy)phenyl)propan-2-yl)phenoxy)propan-2-yl methacrylate". The ECHA Guidance for identification and naming of substances under REACH and CLP (Version: 1.3, February 2014- hereinafter referred to as "the Guidance") states that "*A multi-constituent substance is a substance consisting of several main constituents present at concentrations generally ≥ 10% and < 80% (w/w)*" and "*a multi-constituent substance is named as a reaction mass of two or more main constituents*". Consequently, the chemical name provided would indicate that there are two main constituents present, each at a concentration ≥10% w/w. However, the compositional information provided indicates that there is a third constituent which is typically present at [redacted]%, namely "((((((2-Hydroxypropane-1,3-diyl)bis(oxy))bis(4,1-phenylene))bis(propane-2,2-diyl))bis(4,1-phenylene))bis(oxy))bis(2-hydroxypropane-3,1-diyl) bis(2-methylacrylate)" which has not been included in this multi-constituent type name.

Furthermore, the stereochemistry of the constituents reported in the chemical name of the registered substance has not been specified. This chemical name therefore represents in fact two groups of stereoisomeric constituents rather than distinct individual stereoisomers. Taking into account the possible large number of individual constituents in the substance, a UVCB substance type and chemical name based on the prevalent stereoisomeric constituent groups (such as a name listing the 2 groups of constituents currently quoted and the third group typically present at [redacted]%) may be more appropriate unless detailed compositional information, verifiable by analytical data, shows that individual isomers are indeed present at concentrations ≥10% w/w in which case a multi-constituent approach would be appropriate. At present this information is not available in the Registration dossier. Consequently, the provided name is not appropriate.

Accordingly, pursuant to Article 41(1) and (3) of the REACH Regulation, the Registrant is required to provide an appropriate chemical name for the registered substance.

Regarding how to report the chemical name, the following applies: the chemical name shall be included in the IUPAC name field in IUCLID section 1.1.

2. Composition of the substance (Annex VI, 2.3)

The substance composition corresponds to the chemical representation of what the substance consists of and is therefore an essential part of substance identification and the cornerstone of all the REACH obligations.

ECHA notes that the Registrant did not report consistent information on the identity and concentration of the constituents present in the composition of the registered substance, as required under Annex VI, section 2.3. of the REACH Regulation.

More specifically, it is not clear how the detailed compositional information reported in IUCLID section 1.2 was obtained from the results of the analytical data provided in the registration dossier. Gel permeation chromatography (GPC) and Ultra performance liquid chromatography results (UPLC) are provided, each of which contains the same table of constituents with concentration ranges and typical concentrations. However, in the description of the UPLC method the Registrant states that "*No quantitative information due to detection with UV (unknown absorbtion factors)*" while the GPC method description does not provide any detail as to how these concentration values were calculated from the chromatographic data.

As the details of the analytical methods used for quantification of the constituents as provided in IUCLID section 1.4 are not sufficiently detailed to allow confirmation of the composition presented in IUCLID section 1.2 ECHA concludes that the composition currently reported in the dossier cannot currently be considered appropriate for the identification of the registered substance.

Pursuant to Article 41(1) and (3) of the REACH Regulation, the Registrant is requested to revise the information currently provided in the registration dossier so as to ensure consistency between the reported composition in IUCLID section 1.2 and the analytical information required according to Annex VI, section 2.3.7. of the REACH Regulation and attached in IUCLID section 1.4.
Regarding how to report the composition in IUCLID, further technical details are available in paragraph 2 of the Data Submission Manual 18 on the ECHA website.

B. Information in the technical dossier derived from the application of Annexes VII to XI

As already explained above in Section III.A.1, based on the EC and CAS identifiers and the analytical information, ECHA understands that the registered substance specifically corresponds to the UVCB substance with EC number 500-089-0. The scope of the registration is therefore exclusively limited to the substance as specified above. The information required below shall therefore be submitted on the substance as specified above.

Pursuant to Articles 10(a)(vi) and/or (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.

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

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. Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

The Registrant sought to adapt this information requirement. The justification of the adaptation given by the Registrant was as follows "*Subchronic 90-day toxicity study of Small Vinyl Ester is waived with reference to REACH Annex IX section 8.6.2 column 2, bullet point 4, and Annex XI sections 3.2.a and 3.2.c based on no systemic absorption via the relevant exposure routes, no significant human exposure, and negligible toxicological activity.*"

However, in ECHA's view this adaptation does not meet the specific rules for adaptation of Annex IX, 8.6.2., column 2 according to which no sub-chronic toxicity study needs to be conducted if "the substance is unreactive, insoluble and not inhalable and there is no evidence of absorption and no evidence of toxicity in a 28-day 'limit test', particularly if such a pattern is coupled with limited human exposure." The Registrant has however not justified or demonstrated with data or information that the cumulative conditions of that adaptation possibility are fulfilled. More specifically, the Registrant did not demonstrate that there is no evidence of absorption and neither did he provide an endpoint study record for the results of a 28-day 'limit test'. In fact, the Registrant states in IUCLID section 7.1 of the registration dossier that "*when ingested, Small Vinyl Ester is absorbed by approximately 80%*".

Furthermore, ECHA considers that this adaptation does not meet the general rules for adaptation of Annex XI, section 3.2.(a) or 3.2.(c).

More specifically, according to Article 13(1) and Section 3 of Annex XI of the REACH Regulation, testing in accordance with Annex IX may be omitted based on a thorough and rigorous exposure assessment, provided that any one of the three criteria of Section 3.2. of Annex XI is met and adequate justification and documentation is provided.

The first criterion 3.2(a) requires "*absence of or no significant exposure in all scenarios of the manufacture and all identified uses*". Moreover, relevant PNECs or DNELs are to be derived and exposure results are to be well below the derived PNECs or DNELs.

ECHA considers that adequate and reliable documentation demonstrating the "*absence of or no significant exposure in all scenarios of the manufacture and all identified uses*" has not been provided. A number of PROCs such as 7, 8b, 10, 13 and 14 listed in the exposure scenarios provided suggest significant worker exposure. In addition the toxicokinetic experiments in guinea pigs clearly show large oral absorption (up to 80%) hence the requirements of criterion 3.2(a)(i) are not met. Criterion 3.2(a)(ii) requires that a DNEL be derived from the results of available tests taking into account the increased uncertainty resulting from the omission of the information requirement and criterion 3.2(a)(iii) requires that a comparison of the derived DNEL with the results of the exposure assessment shows that exposures are well below the derived DNEL. DNELs have been derived for long term systemic effects (dermal and inhalation) from acute toxicity studies based on LD50 values. In ECHA's opinion this is not appropriate as such DNELs, derived from acute toxicity effect values cannot be considered as taking full account of the increased uncertainty resulting from the omission of the information requirement. As no adequate DNEL has been derived, a comparison of the derived DNEL with the results of the exposure assessment is redundant and hence criterion 3.2.(a)(iii) is also not met.

The third criterion 3.2(c) sets out conditions which have to be fulfilled for a substance incorporated in an article particularly that the substance is not released during its life cycle, that the likelihood of exposure of workers and general public under normal and foreseeable circumstances is negligible and that the substance is handled under the conditions set out in Article 18(4)(a) to (f) during all manufacturing and production stages including waste management.

Since the substance is not incorporated in an article within the meaning of Article 3(3), this criterion does not apply to this case. Furthermore, strictly controlled conditions as set out in Article 18(4)(a) to (f) are not demonstrated.

Therefore, none of the adaptations of the information requirement suggested by the Registrant can be accepted.

In the comments on the draft decision the Registrant indicates that "*The LR agrees in principle to undertake the 90 days study".* Furthermore, in the updated registration dossier (submission number [redacted]) the Registrant states "*A 90 day oral sub-chronic study has been proposed by ECHA in a draft decision dated 8 January 2014. We accept the requirement to conduct this study and await a formal decision from ECHA before proceeding with the study*".

As explained above, the information available on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently there is an information gap and it is necessary to provide information for this endpoint.

In light of the physico-chemical properties of the substance i.e. a slightly soluble liquid with low vapour pressure, not classified as corrosive/irritating to the skin and/or damaging/irritating to the eyes, ECHA considers that testing by the oral route is most appropriate.

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.

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: Repeated dose 90-day oral toxicity study (test method: EU B.26./OECD 408) in rats.

The results of the studies requested under section II shall be taken into consideration when revising DNELs.

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

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. Adequate information on this endpoint needs to be present in the technical dossier for the registered substance to meet this information requirement.

The Registrant sought to adapt this information requirement. The justification of the adaptation given by the Registrant is as follows "*This study is waived in accordance with Annex XI, section 3.2(a) of the REACH regulation. An exposure assessment covering all relevant exposures throughout the life cycle of the substance demonstrates the absence of or no significant exposure in all scenarios of the manufacture and all identified uses as referred to in Annex VI section 3.5. We are anticipating the conduct of a 90 day sub-chronic toxicity study which will provide a reliable DNEL for risk assessment purposes. We anticipate that a comparison of the DNEL derived from the proposed 90 day sub-chronic study with the results of the exposure assessment will show that exposures are always well below the derived DNEL.*"

However, ECHA notes that the information currently provided in the dossier does not meet the specific rules for adaptation of Annex XI, section 3. According to Article 13(1) and Section 3 of Annex XI of the REACH Regulation, testing in accordance with Annex X may be omitted based on a thorough and rigorous exposure assessment, provided that any one of the three criteria of Section 3 of Annex XI is met and adequate justification and documentation is provided. However, none of the criteria of that adaptation are currently fulfilled for reasons explained in section III.B.1 above. Consequently the adaptation of the information requirement suggested by the Registrant cannot be accepted.

ECHA notes that Annex XI to the REACH regulation sets out a number of opportunities for adaptation. When implementing the decision, the Registrant may always choose to avail himself of these, provided that this adaptation is valid, rather than provide the information using the test method indicated in the final decision. ECHA will evaluate the adaptation/information provided during follow up and conclude as to whether the new information is compliant with the REACH information requirement or not.

ECHA also notes that this adaptation does not meet the specific rules for adaptation of Annex X, 8.7., column 2 because the cumulative conditions of that adaptation are not fulfilled. More specifically, low toxicological activity, lack of systemic absorption and lack of significant human exposure have not been demonstrated. There are no data available on repeated dose toxicity, consequently low toxicological activity cannot be assumed. The toxicokinetic information in the dossier indicates a significant level of absorption. The Registrant states in IUCLID section 7.1 of the registration dossier that "*when ingested, Small Vinyl Ester is absorbed by approximately 80%*". Finally, ECHA considers that adequate and reliable documentation demonstrating "no *or no significant human exposure*" has not been provided. It is unclear whether all uses during the life cycle have been considered. Furthermore, a number of PROCs such as 7, 8b, 10, 13 and 14 listed in the exposure scenarios provided suggest significant worker exposure.
Therefore, the adaptation of the information requirement suggested by the Registrant cannot be accepted.

The Registrant also provided the results of a number of (Q)SARs on teratogenicity, namely the MultiCASE human teratogenicity model and the PASS software system. Annex XI, section 1.3. sets out the conditions which must be fulfilled in order for the results of (Q)SARs to be acceptable as a replacement for experimental studies:

- Results are derived from a (Q)SAR model whose scientific validity has been established,
- The substance falls within the applicability domain of the (Q)SAR model,
- Results are adequate for the purpose of classification and labelling and/or risk assessment, and
- Adequate and reliable documentation of the applied method is provided.

ECHA considers that the (Q)SAR results provided fail to meet the conditions above as the scientific validity of these (Q)SARs with respect to the Registered substance and the endpoint concerned has not been established. Notably, predictions have not been provided for a major constituent of the registered substance (the "sec OH/Prim OH" structure) and furthermore the provided (Q)SAR models do not cover all modes and mechanisms of action involved in pre-natal development toxicity as measured by the required standard test (OECD TG 414). The Registrant assigned a Klimisch reliability score of 4 to these studies. Additionally, no endpoint study records were provided for these results and the information provided is not of sufficient detail to allow ECHA to make an independent assessment of the studies.

Consequently, ECHA does not consider the information provided as sufficient to fulfil the information requirement of Annex IX, 8.7.2.

As explained above, the information available on this endpoint for the registered substance in the technical dossier does not meet the information requirement. Consequently there is an information gap and it is necessary to provide information for this endpoint.

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.

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: Pre-natal developmental toxicity study (test method: EU B.31./OECD 414) in rats or rabbits by the oral route.

Notes for consideration by the Registrant

In addition, a pre-natal developmental toxicity study on a second species is part of the standard information requirements as laid down in Annex X, Section 8.7.2. for substances registered for 1000 tonnes or more per year (see sentence 2 of introductory paragraph 2 of Annex X).

The Registrant should firstly take into account the outcome of the pre-natal developmental toxicity on a first species and all other relevant available data to determine if the conditions are met for adaptations according to Annex X, 8.7. column 2, or according to Annex XI; for example if the substance meets the criteria for classification as toxic for reproduction Category 1B: May damage the unborn child (H360D), and the available data are adequate to support a robust risk assessment, or alternatively, if weight of evidence assessment of all relevant available data provides scientific justification that the study in a second species is not needed. If the Registrant considers that testing is necessary to fulfil this information requirement, he should include in the update of his dossier a testing proposal for a pre-natal developmental toxicity study on a second species. If the Registrant comes to the conclusion that no study on a second species is required, he should update his technical dossier by clearly stating the reasons for adapting the standard information requirement of Annex X, 8.7.2.

C. Deadline for submitting the information

In the draft decision communicated to the Registrant the time indicated to provide the requested information was 36 months from the date of adoption of the decision. This period of time took into account the fact that the draft decision also included a request for a two-generation reproductive toxicity study (Annex X, 8.7.3.). As this endpoint is not addressed in the present decision, ECHA considers that a reasonable time period for providing the required information in the form of an updated IUCLID5 dossier is 24 months from the date of the adoption of the decision. The decision was therefore modified accordingly.

IV. Adequate identification of the composition of the tested material

ECHA stresses that the information submitted by other joint registrants 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

In relation to the information required by the present decision, the sample of substance used for the new studies must be suitable for use by all the joint registrants. Hence, the sample should have a composition that is within the specifications of the substance composition that are given by the joint registrants. It is the responsibility of all joint registrants who manufacture or import the same substance to agree on the appropriate composition of the test material and to document the necessary information on their substance composition.

In addition, 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 by each registrant. If the registration of the substance by any registrant covers different grades, the sample used for the new studies must be suitable to assess these grades.

Finally 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://echa.europa.eu/appeals/app_procedure_en.asp. The notice of appeal will be deemed to be filed only when the appeal fee has been paid.

[redacted]
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