



Decision number: CCH-D-0000001777-64-03/F

Helsinki, 4 November 2011

DECISION ON A COMPLIANCE CHECK OF A REGISTRATION PURSUANT TO ARTICLE 41(3) OF REGULATION (EC) NO 1907/2006**For Rosin, fumarated, reaction products with glycerol and pentaerythritol, CAS No. 92202-14-7 (EC No. 296-047-1), 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 dossier for **Rosin, fumarated, reaction products with glycerol and pentaerythritol, CAS No. 92202-14-7 (EC No. 296-047-1)** submitted by [REDACTED] (Registrant), latest submission number [REDACTED], for 1000 tonnes or more per year.

The compliance check was initiated on 17 June 2011.

On 11 July 2011 ECHA notified the Registrant of its draft decision and invited him pursuant to Article 50(1) of the REACH Regulation to provide comments within 30 days of the receipt of the draft decision.

On 7 August 2011 the Registrant provided to ECHA comments on the draft decision.

ECHA reviewed the further information received and amended the draft decision accordingly.

On 2 September 2011 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 to amend the draft decision within 30 days. Subsequently, Competent Authorities of the Member States did not propose amendments to the draft decision and ECHA took the decision pursuant to Article 51(3) of the REACH Regulation.

This compliance check decision does not prevent ECHA to initiate further compliance checks on the present dossier at a later stage.

II. Information required

- 1) Pursuant to Articles 41(1)(a), 41(3) and 10(a)(ii) as well as Annex VI, section 2 of the REACH Regulation, the Registrant shall submit for the registered substance:
 - a. Composition (Annex VI, 2.3.): Any information which is suitable and necessary to allow ECHA to establish and verify the composition and the name of the registered substance, as specified under section III.1)(a) below;
 - b. Spectral data (Annex VI, 2.3.5.): nuclear magnetic resonance as specified under section III.1)(b) below;
 - c. High-pressure liquid chromatogram or gas chromatogram (Annex VI, 2.3.6), as specified under section III. 1)(c) below and
 - d. Description of the analytical methods (Annex VI, 2.3.7): description of the analytical methods, or the appropriate bibliographical references, to identify the registered substance, including its composition, as specified under section III.1)(d) below.

- 2) Pursuant to Articles 41(1)(a) and (b), 41(3), 10(a)(vi) and (ix), 12(1)(e), 13 and Annexes IX to XI of the REACH Regulation, the Registrant shall submit:
 - a. An adequate justification detailing and documenting why information on other substances members of the Resin/Rosin group, would fulfil the information requirements of the REACH Regulation for the registered substance, as listed under section III.2) below.

Pursuant to Article 41(4) of the REACH Regulation the Registrant shall submit the information in the form of an updated IUCLID dossier to ECHA by **31 January 2012**.

III. Statement of reasons

Based on the examination of the technical dossier, ECHA concludes that the information therein, submitted by the Registrant for registration of the above mentioned substance in accordance with Article 6 of the REACH Regulation, does not comply with the requirements of Articles 10, 12 and 13 and with Annexes VI, X and XI thereof. Consequently, the Registrant is requested to submit the information mentioned above that is needed to bring the registration into compliance with the relevant information requirements.

1) Missing information related to substance identity

Pursuant to Article 10(a)(ii) and Annex VI, section 2 of the REACH Regulation, the technical dossier of the registration shall include information on the identity of the substance. Annex VI, section 2 lists information requirements that shall be sufficient to identify the registered substance.

(a) Composition of the registered 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 corner stone of all the REACH obligations.

ECHA notes that the registration does not contain sufficient information for establishing the composition of the registered substance and therefore the substance identification is not provided as required under Annex VI, Section 2.3 of the REACH Regulation. More specifically, the composition of the substance has not been analysed on the level of individual constituents and the relevant individual constituents or groups of constituents have not been identified and reported in section 1.2 of the substance dataset. In addition, the information provided in section 1.4 is not sufficient to derive a meaningful composition of the substance. Therefore, the substance identity, including the chemical name, could not have been verified.

Furthermore, the provided chemical name and identifiers Rosin, fumarated, reaction products with glycerol and pentaerythritol, CAS 92202-14-7 (EC No 296-047-1), are not by themselves enough to identify the substance and its composition with sufficient precision.

Following section 4.3 of the Guidance for identification and naming of substances under REACH

http://guidance.echa.europa.eu/docs/guidance_document/substance_id_en.pdf, the Registrant should note that for UVCB substances presenting a large number of constituents, such as the registered substance, the following applies:

- All constituents present in the substance with a concentration of $\geq 10\%$ shall be identified and reported individually;
- All constituents relevant for the classification and/or PBT assessment of the registered substance shall be identified and reported individually; and
- Other constituents shall be identified by a generic description of their chemical nature. The identification of these other constituents must be provided in order to allow ECHA to establish the composition of the substance as manufactured and to use the compositional information as one identifier for the registered substance. This information must also allow ECHA to verify that the composition is consistent with the chemical name reported for the registered substance. The Registrant must provide any information which is suitable and necessary to meet these objectives.

In line with the above, the Registrant is requested to provide any information which is suitable and necessary to allow ECHA to establish and verify the composition and the name of the registered substance.

Based on composition of the registered substance and the relevant analytical data the Registrant is requested to reconsider the substance name and other identifiers and revise them, if necessary.

Regarding how to report the composition of the registered substance in IUCLID, the following applies: The Registrant should report the composition of the registered substance in IUCLID section 1.2. For each constituent required to be reported individually, the IUPAC name, CAS name and CAS number (if available), molecular and structural formula, as well as the minimum, maximum and typical concentration, shall be reported in the appropriate fields in IUCLID. The Registrant should report the chemical name of the registered substance in the IUPAC name field of IUCLID section 1.1.

For the other constituents to be reported under a generic description, a generic chemical name describing the group of constituents, generic molecular and structural information (if applicable), as well as the minimum, maximum and typical concentration, shall be reported in the appropriate fields in IUCLID.

Further technical details on how to report the composition of UVCB substances in IUCLID are available in paragraphs 2.1 and 2.2.2 of the Data Submission Manual 18 on the ECHA website at:

http://echa.europa.eu/doc/reachit/dsm18/substance_id_report_iuclid_en.pdf.

(b) Spectral data (Annex VI, 2.3.5.):

ECHA points out that the registration contains a nuclear magnetic resonance (NMR) spectrum required under Annex VI, section 2.3.5 of the REACH Regulation but this spectrum does not show the signal expected for a substance as described in section 1.1 of the dossier. In particular, the ¹³C signal around 185 ppm expected for the rosin acid carboxyl group is much smaller than expected. Also the presence of the glycerol moiety can not be confirmed using the NMR data. These inconsistencies raise concerns about the validity of the NMR data or the identity of the substance.

Therefore, the Registrant is requested to provide additional clarification or to submit a new NMR spectrum that is fit to support the identity of the substance as described in sections 1.1 and 1.2 of the registration dossier. In case special considerations are necessary to interpret the data, these shall be stated.

As for the reporting of the spectral data in the registration dossier, the spectra should be attached in IUCLID section 1.4.

(c) High-pressure liquid chromatogram, gas chromatogram (Annex VI, 2.3.6)

ECHA recognises that a high-pressure liquid chromatogram or gas chromatogram for identifying the composition of the substance is not provided in the registration dossier, as required by Annex VI, Section 2.3.6. Instead of that a gel permeation chromatogram (GPC) is provided. However, this analytical method does not provide sufficient information on the detailed composition of the substance as it gives only low resolution information on the presence of constituents with different molecular weight. Considering the found molecular masses a more detailed analysis on the identity of individual constituents and their concentrations - possibly complemented by GPC for higher molecular species - seems necessary for substance identification.

Therefore, ECHA concludes the provided information is not sufficient to identify the composition of the substance.

Accordingly, in line with Annex VI, 2.3.6, the Registrant is requested to submit a gas chromatogram or a high pressure liquid chromatogram. The chromatogram should be recorded in such way that the individual constituents are separated, identified and quantified. Similar constituents might be grouped if it is not possible to identify individual constituents.

As for the reporting of the chromatogram in the registration dossier, the chromatogram should be attached in IUCLID section 1.4.

Furthermore the results should be used to report the composition of the registered substance in IUCLID section 1.2.

- (d) Description of the analytical methods or the appropriate bibliographical references for the identification of the substance (Annex VI, 2.3.7.)

ECHA observes that the registration does not contain sufficient details of the analytical methods used to identify the composition of the substance, as required by Annex VI, Section 2.3.7 of the REACH Regulation.

The quantitative analysis of the GPC (gel permeation chromatography) data applied by the Registrant is not described adequately. The choice of cut-off times/masses for the assignment of different ester species has not been explained. In case the GPC method will be replaced, the alternative method including the quantitative analysis of the raw data shall also be described in sufficient detail to be able to reproduce the method and verify the correctness of the results.

Accordingly, in line with Annex VI, 2.3.7, the Registrant is requested to submit the description of the missing analytical methods, or the appropriate bibliographical references, to identify the registered substance, including its composition and results of the method used. The information shall be sufficient for each method to be reproduced and shall therefore include details of the experimental protocol followed, the calculation used and the result obtained.

Regarding how to report this information in the IUCLID, the following applies: The Registrant should attach information on the analytical methods or the appropriate bibliographical references used for the identification and quantification of the substance and its composition in IUCLID section 1.4.

2) Missing information concerning the use of read-across / grouping approach

The technical dossier submitted by the Registrant contains a general statement for using a grouping approach for rosins, including the registered substance, to fulfil information requirements under the REACH Regulation for the registered substance. The group of rosins is said to consist of different categories. The Registrant suggests that the registered substance, i.e. rosin, fumarated, reaction products with glycerol and pentaerythritol, is a member of the category 4 "Rosin adduct esters".

The information (i.e. list of substance names, CAS and EC numbers) provided in the two documents attached in IUCLID section 13 of the IUCLID dossier are consistent neither with each other (in particular, the registered substance does not appear in the list of substances of Family 4 in the document Justification for merging SIEFs.pdf) nor with lists provided by other registrants of the reportedly same category.

The category justification provided by the Registrant is generic and consists, for example, of similarity of production methods and precursors and a list of different categories of rosins and their members. While there is some similarity between the precursors of different rosins, the Registrant did not provide sufficient information on the chemical similarity between the registered substance and the read-across substance(s) from which the data referred to below in the dossier were obtained. Furthermore, no information was provided on the break-down products or metabolites of the registered substance.

ECHA notes that the toxicological data from the following endpoints have been obtained from studies performed using the registered substance, e.g. acute toxicity-oral, sensitisation and in vitro mutagenicity-Ames. For all other toxicological endpoints, the data provided in the IUCLID (and CSR) dossiers are obtained using read-across from the following substances of the Resin/Rosin group:

Skin irritation/corrosion	CAS 97489-11-7 [REDACTED] ¹ CAS 94581-15-4 [REDACTED], Resin acids and Rosin acids, fumarated, esters with pentaerythritol and CAS 94581-17-6 [REDACTED] ¹
Eye irritation	CAS 97489-11-7 [REDACTED] ¹ and CAS 94581-17-6 [REDACTED] ¹
Repeated dose toxicity:oral	CAS 94581-15-4 Resin acids and Rosin acids, fumarated, esters with pentaerythritol and CAS 65997-04-8 Rosin fumarated
In vitro mammalian chromosome aberration test	CAS 94581-15-4 Resin acids and Rosin acids, fumarated, esters with pentaerythritol
Mammalian gene mutation assay	CAS 94581-15-4 Resin acids and Rosin acids, fumarated, esters with pentaerythritol
Toxicity to reproduction	CAS 94581-15-4 Resin acids and Rosin acids, fumarated, esters with pentaerythritol CAS 65997-04-8 Rosin fumarated CAS 8050-09-7 Rosin and CAS 8050-26-8 Rosin pentaerythritol ester
Developmental toxicity	CAS 94581-15-4 Resin acids and Rosin acids, fumarated, esters with pentaerythritol

No sufficient comparison between the registered substance and the read-across substances with regard to physical-chemical, ecotoxicological and toxicological properties of the registered substance and the read-across substances were included in the registration dossier. Moreover, no comparison between the other category members and the registered substance was provided to further justify the read-across within the category. It is not clear from the registration dossier on which grounds, listed in Annex XI, section 1.5., governing grouping of substances and read-across this grouping approach is based on.

Article 13(1) and Annex IX and X, third introductory paragraph, require the Registrant to clearly state reasons for adapting the standard information according to the rules in Annex XI. More specifically, Annex XI, section 1.5. provides that substances whose physicochemical, toxicological and ecotoxicological properties are likely to be similar or

¹ The CAS number and name of test material follow the information provided in IUCLID.

follow a regular pattern as a result of structural similarity may be considered as a group, or 'category' of substances. Application of the group approach requires that physicochemical properties, human health effects and environmental effects or environmental fate may be predicted from data for reference substance(s) by interpolation to other substances in the group (read-across approach).

The similarities, may, according to Annex XI, section 1.5., be based on:

- (1) common functional group;
- (2) the common precursors and/or the likelihood of common breakdown products via physical or biological processes, which result in structurally similar chemicals; or
- (3) a constant pattern in the changing of the potency of the properties across the category.

Annex XI, section 1.5. requires that the results (i) are adequate for the purpose of classification and labelling and/or risk assessment, (ii) have adequate coverage of the key parameters and cover an exposure duration addressed in the corresponding test method referred to in Article 13(3) and (iii) that the documentation of the applied method is adequate and reliable.

ECHA points out that the read-across / category justification presented in the dossier does not specify the composition of the registered substance and the substances used for read-across. In addition, the registration dossier does not specify which information is available on the physicochemical properties, human health effects and environmental effects of these substances. The relevance of any read-across / category approach cannot be confirmed without this information.

While some relevant information on the similarity of substances, and on the common precursors as required under Annex XI, section 1.5. were provided, based on that information it is not possible for ECHA to consider if the legal provisions of Annex XI needed for a group or category of substances are met. Therefore, the requirements of Annex XI, section 1.5. in conjunction with Article 13(1) and Annex X, third introductory paragraph, of the REACH Regulation are deemed not to be met.

Taking into account the substance identity information requested under point 1), the Registrant is thus requested to submit a justification detailing why the data obtained using the read-across substances listed above would fulfil the information requirements listed above for the registered substance in line with Annex XI, section 1.5.

To justify the above mentioned read-across, further information on the grouping approach must also include the identity of the substances that are members of the category of the registered substance, including their composition. Furthermore, it is to be clearly and fully indicated for which substances test data exists on the physicochemical properties, human health effects and environmental effects. Moreover, information on the production processes that could further justify the grouping approach, is to be provided. This issue is reported in paragraphs 6.2.5 and 6.2.6 of the Guidance on QSARs and grouping of chemicals

http://guidance.echa.europa.eu/docs/guidance_document/information_requirements_r6_en.pdf?vers=20_08_08

and in a Practical Guide: "How to report read-across and categories" that can be found on the ECHA web page

http://echa.europa.eu/doc/publications/practical_guides/pg_report_readacross_categ.pdf

This above-mentioned information on physicochemical properties, human health effects and environmental effects that are used to justify the grouping approach should also be reported in the IUCLID registration dossier in a form of robust study summaries or study summaries.

IV. General requirements for the generation of information and Good Laboratory Practice

ECHA always reminds registrants of the requirements of Article 13(4) of the REACH Regulation that reads:

“Ecotoxicological and toxicological tests and analyses shall be carried out in compliance with the principles of good laboratory practice provided for in Directive 2004/10/EC or other international standards recognised as being equivalent by the Commission or the Agency and with the provisions of Directive 86/609/EEC, if applicable.”

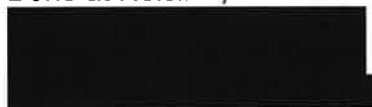
According to Article 13(3) of the REACH Regulation, tests that are required to generate information on intrinsic properties of substances shall be conducted in accordance with the test methods laid down in a Commission Regulation or in accordance with other international test methods recognised by the Commission or the European Chemicals Agency as being appropriate. Thus, the Registrant shall refer to Commission Regulation (EC) No 440/2008 laying down test methods pursuant to Regulation (EC) No 1907/2006, as adapted to technical progress, and use the applicable test methods to generate the information on the endpoints indicated above.

National authorities monitoring good laboratory practice (GLP) maintain lists of test facilities indicating the relevant areas of expertise of each facility.

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.

Done at Helsinki,



Jukka Malm
Director of Regulatory Affairs