

Decision number: TPE-D-0000004947-60-05/F

Helsinki, 14 August 2014

DECISION ON A TESTING PROPOSAL SET OUT IN A REGISTRATION PURSUANT TO ARTICLE 40(3) OF REGULATION (EC) NO 1907/2006**For Rosin, reaction products with formaldehyde, CAS No 91081-53-7 (EC No 293-659-0), 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 jointly submitted registration dossier in accordance with Articles 10(a)(ix) and 12(1)(e) thereof for Rosin, reaction products with formaldehyde, CAS No 91081-53-7 (EC No 293-659-0), submitted by [REDACTED] (Registrant). The dossier contains a document "Testing strategy for a UVCB category comprising Rosins and their salts", which can be summarised as follows:

- Sub-chronic toxicity studies (OECD Guideline 408, rat, oral route) to be performed on Rosin (CAS No. 8050-09-7), Rosin hydrogenated (CAS 65997-06-0) and on the substance subject to the present decision.
- Pre-natal developmental toxicity study (OECD Guideline 414, rat, oral route) to be performed on Rosin (CAS No. 8050-09-7).
 - The dossier will be supplemented with proposals for Pre-natal developmental toxicity study for the substance subject to the present decision, if screening level and/or sub-chronic toxicity results indicate that the substance is potentially more hazardous than Rosin.
- Two-generation reproduction toxicity study (OECD Guideline 416, rat, oral), to be performed on Rosin, (CAS No. 8050-09-7).
 - The dossier will be supplemented with proposals for Two-generation reproduction toxicity study for the substance subject to the present decision, if screening level or sub-chronic toxicity results indicate that the substance is potentially more hazardous than Rosin.

The present decision relates solely to the examination of the testing proposal for Sub-chronic toxicity study (90-days) and Pre-natal development toxicity studies. The testing proposal for Two-generation reproductive toxicity study is addressed in a separate decision although the testing proposals were initially addressed together in the same draft decision. This decision is based on the registration dossier as submitted with submission number [REDACTED], for the tonnage band of 1000 tonnes or more per year. In order to follow the procedure outlined in Articles 50(1) and 51 of the REACH Regulation and to allow ECHA to complete the necessary administrative practices for the Member States Competent

Authorities' referral, ECHA took into consideration dossier updates pertinent to the decision received by the deadline of 7 January 2014 as agreed between ECHA and the Registrant.

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.

On 1 October 2010, pursuant to Article 40(1) of the REACH Regulation, ECHA initiated the examination of the testing proposal set out by the Registrant in the registration dossier for the substance mentioned above in relation to pre-natal developmental toxicity based on a read-across argumentation.

ECHA held a third party consultation for the testing proposal from 6 March 2012 until 20 April 2012. ECHA did receive information from third parties (see section III. below).

The dossier was later updated by the Registrant with additional testing proposals for sub-chronic toxicity (90-days) and two-generation reproductive toxicity and with additional substances covered by the category.

On 26 April 2013, pursuant to Article 40(1) of the REACH Regulation, ECHA initiated the examination of the testing proposals set out by the Registrant in the updated registration dossier.

ECHA held a third party consultation for the testing proposal from 2 July 2013 until 16 August 2013. ECHA did not receive information from third parties.

On 23 October 2013 ECHA sent the draft decision to the Registrant and invited him to provide comments within 30 days of the receipt of the draft decision. That draft decision was based on submission number [REDACTED].

On 22 November 2013 ECHA received comments from the Registrant. On 3 January 2014 the Registrant updated his registration dossier (submission number [REDACTED]). ECHA considered the Registrant's comments received. On basis of this information, Section II (testing required) was amended. The Statement of Reasons (Section III) was changed accordingly.

On 6 March 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 10 April 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.

On 22 April 2014 ECHA referred the draft decision to the Member State Committee.

By 12 May 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 the Sub-chronic toxicity study (90-days) and Pre-natal development toxicity studies was reached on 26 May 2014 in a written procedure launched on 15 May 2014. ECHA took the decision pursuant to Article 51(6) of the REACH Regulation.

II. Testing required

The Registrant shall carry out the following proposed tests pursuant to Article 40(3) of the REACH Regulation using the indicated test methods and the substance(s) indicated below:

1. Sub-chronic toxicity study (90-days) in rats, oral route (Annex IX, 8.6.2.; test method: EU B.26/OECD 408) on the substance subject to this decision; and
2. Pre-natal developmental toxicity study in rats or rabbits, oral route (Annex IX, 8.7.2.; test method: EU B.31/OECD 414)

on either:

- a. the analogue substance Rosin CAS No. 8050-09-7 (EC No. 232-475-7), if the result of the proposed OECD 408 studies and available/on-going OECD 422 studies indicate that Rosin, reaction products with formaldehyde, CAS No 91081-53-7 (EC No 293-659-0) is not potentially more hazardous than Rosin CAS No. 8050-09-7 (EC No. 232-475-7); or
- b. the substance subject to the present decision, if the result of the proposed OECD 408 studies or available/on-going OECD 422 studies indicate that Rosin, reaction products with formaldehyde, CAS No 91081-53-7 (EC No 293-659-0) is potentially more hazardous than Rosin CAS No. 8050-09-7.

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

Data from a second pre-natal developmental toxicity study on another species is a standard information requirement according to Annex X, 8.7.2. of the REACH Regulation. 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. 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.

At any time, the Registrant shall take into account that there may be an obligation to make every effort to agree on sharing of information and costs with other Registrants.

3. Deadline for submitting the required information

Pursuant to Articles 40(4) and 22 of the REACH Regulation, the Registrant shall submit to ECHA by **21 August 2017** an update of the registration dossier containing the information required by this decision. 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.

In relation to the testing proposals subject to the present decision, the Registrant has proposed to use a read-across and grouping approach, in accordance with Annex XI, 1.5, and to perform the proposed tests on analogue substance(s) that are members of the same category. To the extent that all proposed testing relies upon an identical read-across justification, ECHA has considered first the scientific validity of the proposed read-across and grouping approach (preliminary considerations; Section 0, below), before assessing the testing proposed (Section 1 and 2, below).

0. Grouping of substances and read-across approach (preliminary considerations)

0.1. Legal Background on ECHA's assessment of the grouping of substances and read-across approach brought forward by the Registrant

The evaluation by ECHA of testing proposals submitted by registrants aims at ensuring that generation of information is tailored to real information needs. To this end, it is necessary to consider whether programmes of testing proposed by Registrants are appropriate to fulfil the relevant information requirements and to guarantee the identification of health and environmental hazards of substances. In that respect, the REACH Regulation aims at promoting wherever possible the use of alternative means, where equivalent results to the prescribed test are provided on health and environmental hazards.

Article 13(1) of the REACH Regulation requires information on intrinsic properties of substances on human toxicity to be generated whenever possible by means other than vertebrate animal tests, including information from structurally related substances (grouping or read-across), "provided that the conditions set out in Annex XI are met".

According to Annex XI, 1.5 there needs to be structural similarity among the substances within a group or a category such that the relevant properties of a substance within the group can be predicted from the data for reference substance(s) within the group by interpolation.

The Registrant has submitted testing proposals, based on a grouping and read-across approach, intended to fulfil information requirements for pre-natal developmental toxicity (Annexes IX and X, 8.7.2.).

The first Recital and the first Article of the REACH Regulation establish the "promotion of alternative methods for assessment of hazards of substances" as an objective pursued by the Regulation. In accordance with that objective, ECHA considers whether a prediction of

the relevant properties of the substance subject to this decision by using the results of the proposed tests is sufficiently plausible based on the information currently available.

0.2. Grouping of substances and read-across hypothesis as proposed by the Registrant

According to the Registrant, the substance subject to this decision can be grouped with other substances in a category for the purpose of read-across. The grouping is based on the premise that all substances that are members of the category are structurally related; i.e. all the substances are UVCBs (substances of Unknown or Variable composition, Complex reaction products or Biological materials) derived from the UVCB starting material Rosin CAS No. 8050-09-7 (EC No. 232-475-7), and are chemically modified.

The Registrant considers substances that fulfil the following criteria as members of the category:

- There is commonality in the resin acids present in the various category members: abietic, dehydroabietic and pimaric acids tend to dominate, with the highest concentrations present in Rosin.
- Dihydro and tetrahydro abietic acid are present in all category members, with the highest concentrations present in Rosin, hydrogenated.
- Rosin dimers can be present in all of the substances included in the category, with highest levels occurring in Rosin, oligomers; rosin trimmers occur only in Rosin, oligomers.
- While methyl dehydro abietic acid is present only in Rosin, reaction products with formaldehyde, the remaining compositional aspects of this category member resembles those of Rosin and Rosin, hydrogenated.
- The neutral fraction and labdane acids are present in all category members.

The Registrant did not provide a fully detailed read-across hypothesis. However in ECHA's understanding, based on the content of the dossier, the Registrants working read-across hypothesis is that the substance(s) selected for higher tier testing can address the structural diversity within the category, and this will enable prediction of the toxicological properties within the category.

Additionally, the Registrant assumes, based on chemicals similarity and currently limited other data that substances will exhibit similar toxicity, and that bioavailability and toxicity of the substances belonging to this category are relatively low. In particular, the Registrant assumes that the substance subject to this decision will not be found potentially more hazardous than the source substance of the read-across Rosin (CAS No. 8050-09-7).

0.3. Information submitted by the Registrant to support the grouping of substances and read-across approach

The Registrant has provided a justification document for the category of 'Rosins and their salts'. This document contains an overview of the grouping approach proposed; additional information on the testing proposals for sub-chronic toxicity (90-days), pre-natal developmental toxicity, including a rationale for selection of test material(s); a summary of the composition ranges and physico-chemical properties of the substance concerned by the category; information on the underlying chemistry; and an overview of planned/on-going experimental work (ex vivo absorption tests and combined repeated dose toxicity study with the reproduction/developmental toxicity screening tests, OECD Guideline 422) intended to increase the scientific reliability of the grouping and read-across approach.

Furthermore, the Registrant has provided an oral (feeding) Reproduction/Developmental Toxicity Screening Test (OECD Guideline 421) Rosin CAS 8050-09-7. ECHA notes that following feeding of Rosin, the NOAEL for reproductive toxicity was considered to be 3000 ppm (248-309 mg/kg/day). In addition, several sub-chronic and chronic studies made with Rosin and Rosin oligomers were provided. These tests have been performed in early sixties in test laboratories. ECHA notes that these studies cannot be fully relied on as, to ECHA's knowledge during the time when these studies were performed, these laboratories have provided inadequate and unreliable data.

The Registrant has also provided physical-chemical data that shows no significant difference among the members of the category. For example data on physical state, density, and vapour pressure and on partition coefficient suggest that there is similarity among the substances.

Furthermore, as there currently is very limited toxicological information available for the substances in this category, the Registrant commits in the testing program to address this deficiency by conducting ex vivo absorption tests on all the substances in the category and combined repeated dose toxicity study with the reproduction/developmental toxicity screening tests (OECD Guideline 422) on Rosin, (CAS 8050-09-7), Rosin, hydrogenated, (CAS 65997-06-0), Rosin, oligomers (CAS No. 65997-05-9), and on Rosin, reaction products with formaldehyde (CAS 91081-53-7).

The Registrants intends to use the information obtained from the absorption study as a quantitative indication of uptake and as a qualitative assessment of which chemical species that are absorbed. Both ex vivo absorption and OECD 422 studies are intended to support the read-across hypothesis and provide information to what extent the toxicological properties vary within the category.

0.4. ECHA analysis of the selection of substances to be tested

The Registrant has proposed to test Rosin (CAS No 8050-09-7) for pre-natal developmental toxicity and for two-generation reproductive toxicity. The intention of the Registrant is to cover the structural variability of the category. ECHA notes that based on currently available information, the substance proposed to be tested for two endpoints, i.e. Rosin (CAS No 8050-09-7) sufficiently covers the limited structural diversity within the category.

The comparison of the composition of substance subject to this decision and analogue substance Rosin (CAS No 8050-09-7), shows no significant chemical or structural differences between the substance subject to the present decision and Rosin. Manufacturing of the substance subject to the present decision does not introduce new functional groups or structures as compared with the suggested analogue Rosin (CAS No 8050-09-7), except methyl dehydroabiatic acid. Concerning that substance, which is found in the substance subject to this decision but not in Rosin, the Registrant has explained that the extra methyl group is not likely to increase the reactivity of the substance and the properties of this constituent are similar as those of dehydroabiatic acids, which is a components in Rosin, the sources substance of read-across.

0.5. ECHA analysis of the grouping approach and the read-across hypothesis of the Registrant in light of the requirements of Annex XI, 1.

ECHA noted (in the draft decision dated 22 October 2013), that there are some chemical differences between the substance subject to the present decision and the other suggested members of the category. Annex XI, 1.5. requires a structural similarity among the

substances within the group or category to allow prediction of relevant property within the group from the data on reference substance(s) within the group by interpolation.

It was noted that the substance subject to the present decision differs from the other suggested members of the category (except Rosin, polymer with formaldehyde, potassium salts, CAS No. 92129-53-8), because formaldehyde, which is classified as hazardous, is introduced in the manufacturing process of the substance subject to the present decision and because the ring structure of certain resin acid becomes methyl substituted. Furthermore, in the manufacturing process, levopimaric acid is generated, which is more reactive than the constituents of other suggested members of the category. Furthermore, in the manufacturing process methyl dehydro abietic acid is formed, which constituent is not present in the other suggested members of this category.

In the dossier update, the Registrant has provided further information to substantiate his claim of chemical and structural similarities between the substance subject to the present decision and the source substance of the read-across, i.e. Rosin, as follows:

- Levopimaric acid, which is only a minor constituent of Rosin or other substances in this category, is produced in the manufacture of the registered substance. However, according to the dossier update, levopimaric acid will isomerize back to the abietic type rosin acids upon cooling down, which is confirmed by the GC and GC/MS data in the analytical report for rosin formaldehyde. Levopimaric acid is also identified as one of the constituents present in rosin at a concentration of approximately █%. Therefore, the presence of a low amount of levopimaric acid in rosin formaldehyde would not introduce a difference in composition compared to rosin.
- According to the update, no residual formaldehyde is expected to be present in the reaction product due to the applied molar ratio rosin:formaldehyde (2.65 : 1), the high reactivity and high volatility of formaldehyde. Formaldehyde has a vapour pressure of 3890 mm Hg at 25 °C), so any formaldehyde that does not react with rosin, will evaporate. This is confirmed by analytical measurements, where free formaldehyde content in rosin formaldehyde was found to be below the detection limit.
- Two methyl dehydroabietic acids are constituents of Rosin, reaction products with formaldehyde that are not found in rosin or other members of this category; therefore these compounds make the registered substance chemically different from the suggested source substance of the read-across, i.e. Rosin. Dehydroabietic acid is a constituent typically found in rosin chemicals. In the dossier update, comparison of the structure of the two methyl dehydroabietic acids to dehydroabietic acid is given. According to the registrant, it is evident that these structures strongly resemble each other. Furthermore the registrant has compared the Aliphaticity, Dimensional properties like volume and surface, Acidity and Polarity of methyl dehydroabietic acids to those of other common rosin acids. Based on this comparison the Registrant concludes that "extra methyl group (in methyl dehydroabietic acids) does not lead to an increase in chemical reactivity. Also other properties like aliphaticity, molecular volume and surface, acidity and polarity are predictable within the range of rosin acids and are all within value ranges calculated for the outer representative rosin acids chosen."

ECHA understands that the grouping approach is based on a structural similarity resulting from the common UVCB starting material Rosin with variations in the relative proportions of abietic, dehydroabietic and pimaric acid and dihydro and tetrahydro abietic acid.

After evaluation of the comments and the dossier update, ECHA concludes that the Registrant has provided information, which sufficiently substantiates the chemical and structural similarity of the substance subject to the present decision and the source substance of read-across, Rosin.

Furthermore, generation of levopimaric acid and methyl dehydroabietic acid in the manufacturing process of the substance subject to the present decision is not considered to add structural variability, and therefore, concerning the substance subject to the present decision, the grouping as proposed by the Registrant is considered acceptable.

ECHA understands that the read-across hypothesis assumes that the bioavailability and toxicity are low for both the substance subject to this decision and the suggested source substance of the read-across, Rosin (CAS No 8050-09-7). Specifically, the Registrant assumes that Rosin, reaction products with formaldehyde (CAS No 91081-53-7) (i.e. substance subject to this decision) is not potentially more hazardous than Rosin. Based on the available compositional information and supporting information about the underlying chemistry, ECHA considers the read-across hypothesis plausible.

However, ECHA notes that currently the read-across hypothesis is based only on the assumption of structural/compositional similarity due to lack of sufficient toxicological information.

While ECHA recognizes the relevance of structural/compositional similarity, it concludes that the Registrant's assumption of similar toxicity for the category members is not supported by the currently available information. This circumstance creates uncertainties that will have to be addressed by the Registrant in order to meet the conditions set out in Annex XI, section 1.5. of the REACH Regulation.

The Registrant has recognized the necessity to provide sufficient toxicological information to substantiate the hypothesis for the substances in the category and committed to undertake additional studies intended to strengthen the toxicological information for the read-across approach. This includes two combined repeated dose toxicity studies with the reproduction/developmental toxicity screening tests on Rosin and Rosin, reaction products with formaldehyde (OECD 422). ECHA considers that generating this additional information on Rosin and on Rosin, reaction products with formaldehyde is therefore an essential condition for the ultimate compliance of the read-across approach in relation to pre-natal developmental toxicity and toxicity to reproduction.

In addition, the Registrant has committed to provide ex vivo absorption data on all members of the category. Absorption information is to be generated using an "everted gut-sac model". ECHA considers that this model is currently not validated for this type of substances, that currently the Registrant has not demonstrated that the ex vivo absorption observed accurately predicts in vivo gastrointestinal absorption and ultimately correlates to the systemic toxicity observed in available toxicity studies. These uncertainties should be addressed by the Registrant. Nevertheless, ECHA considers that information on bioavailability is useful to strengthen read-across argumentation and considers it to be an essential condition for the ultimate acceptance and use of read-across for the category.

Furthermore, the Registrant assumes that the results of the above mentioned studies and the proposed sub-chronic toxicity (90-days) studies for Rosin, and Rosin, reaction products with formaldehyde, will demonstrate that Rosin, reaction products with formaldehyde, CAS No 91081-53-7 (EC No 293-659-0) is not potentially more hazardous than Rosin CAS No. 8050-09-7 (EC No. 232-475-7). However, ECHA notes that the Registrant has not specified any criteria on the basis of which the assumption can be confirmed.

In that respect, ECHA considers that the following criteria are decisive for the actual determination of whether the above assumption is verified:

- no adverse effects are observed in any organs or tissues for both source and target substances when tested up to the limit dose in a study of the same duration; or
- comparable effect(s) (i.e. in terms of type of effect, severity and incidence in the same species/strain) are observed in the same organ(s), tissue(s) or parameters at equal dose level for both source and target substances when tested in a study of the same duration; or
- more severe effects are seen for the source substance than for the target substance of the read-across (i.e. in terms of type of effect, and incidence in the same species/strain) observed in the same organ(s), tissue(s) or parameters at equal dose level when tested in a study of the same duration.

To assess whether the above criteria are met, the Registrant shall at least compare the parameters covered in the corresponding test guidelines and analyse the effects observed and thereafter conclude on the overall test results. The Registrant shall also consider the classification and labelling criteria given in Annex I of Regulation (EC) No 1272/2008, Chapters "3.7 Reproductive toxicity" and "3.9 Specific target organ toxicity – repeated exposure".

Additionally, the assessment has to consider differences in potential of the substances to cause reproduction/developmental toxicity.

ECHA considers that the above criteria and information are therefore an essential condition for the valid justification of the similarity of toxicity of the substance covered by the category and, hence, for the ultimate compliance of the read-across approach to be submitted by the Registrant.

In the case where the result of the proposed OECD 408 studies or available/on-going OECD 422 studies performed in accordance with the present decision would not confirm the grouping and read-across hypothesis relied upon by the Registrant, this outcome shall not alter the obligation of the Registrant to meet the standard information requirements. Should the read-across strategy be inadequate, it is the responsibility of the Registrant to ultimately submit reliable information or adaptations which is used in a way that does not underestimate hazards of the registered substance in relation to the relevant endpoints.

Finally, the read-across adaptation based on the results of the proposed tests shall ensure that any remaining uncertainties, including results of any existing studies which might give rise to concern, are analysed, minimized, and taken into account for the purpose of classification and labelling and/or risk assessment.

In any case, following the update of the dossier submitting the information required in the present decision, ECHA will determine whether the documentation provided is sufficient to satisfactorily address the information requirements of Annexes IX and X for the substance subject to the present decision.

1. Sub-chronic toxicity study (90-days)

a) Examination of the testing proposal

Pursuant to Article 40(3) 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, proposed to be carried out, in rats, via the oral route with the substances Rosin, (CAS No 8050-09-7) and Rosin, hydrogenated (CAS No 65997-06-0) and the substance subject to the present decision.

ECHA notes that one of the substances proposed to be tested is the substance subject to the present decision. Therefore, ECHA considers that for the purpose of this decision testing with the substance subject to the present decision is sufficient to fulfil the information requirements for sub-chronic toxicity.

The Registrant proposed testing by the oral route. In the light of the physico-chemical properties of the substance and the information provided on the uses and human exposure, ECHA considers that testing by the oral route is appropriate. However, the Registrant has stated in the technical dossier for Rosin (CAS 8050-09-7) that reduced food consumption and associated reduction in body weight gain was observed in oral feeding studies (e.g. the OECD 421 studies) which may stem from low palatability of the feed. If the Registrant has reasons to assume that food consumption is significantly reduced in the oral studies, ECHA advises the Registrant to consider that oral administration via intubation (gavage) for sub-chronic toxicity is the most appropriate.

b) Consideration of the information received during third party consultation

ECHA did not receive third party information concerning the testing proposal on this endpoint during the third party consultation.

c) Outcome

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

2. Pre-natal developmental toxicity study

a) Examination of the testing proposal

Pursuant to Article 40(3) 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, based on grouping of substances and read-across, for a pre-natal developmental toxicity study (EU B.31/OECD 414), proposed to be carried out, in rats, via the oral route with the substance Rosin, (CAS No. 8050-09-7).

The Registrant proposed testing in rats by the oral route. 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 that testing with the rat or the rabbit as a first species is appropriate. With regard to the route of administration, the Registrant has stated in the technical dossier for Rosin (CAS 8050-09-7) that reduced food consumption and associated reduction in body weight gain was observed in oral feeding studies (e.g. the OECD 421 studies) which may stem from low palatability of the feed. Furthermore, according to EU B.31/OECD 414 "*the test substance is usually administered orally by intubation*" (gavage). Therefore, ECHA considers that testing by the oral route via intubation (gavage) is most appropriate.

b) Consideration of the information received during third party consultation

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

Third party information 1:

A third party claims that: "Rosin, reaction products with formaldehyde, is a UVCB compound belongs to the category of 'Rosin, Hydrogenated rosin and their mono- and di-valent salts'", and then refers to column 2 of Annex IX and X of Regulation (EC) No 1907/2006 according to which the study does not need to be conducted if "the substance is of low toxicological activity (no evidence of toxicity seen in any of the tests available), it can be proven from toxicokinetic data that no systemic absorption occurs via relevant routes of exposure (e.g. plasma/blood concentrations below detection limit using a sensitive method and absence of the substance and of metabolites of the substance in urine, bile or exhaled air) and there is no or no significant human exposure".

ECHA points out that according to the registrant the registered substance is not a member of the category 'Rosin, Hydrogenated rosin and their mono- and di-valent salts. In addition, ECHA points out that while the existing data suggest that rosin is of low toxicity, mild signs of toxicity have been observed in repeated dose toxicity studies (effects on liver weight and histology of the kidneys). Therefore, the first criteria of Annex IX, 8.7, column 2 does not apply. Secondly the available data on absorption suggests that the bioavailability is below 5%, and thus it cannot be proved that no systemic absorption occurs. Furthermore, these toxicokinetic data have been obtained by using a substance which is not one of the three proposed to be used for read-across. Thirdly, from the data provided it can be preliminary concluded that the human exposure is low. However, since there is multitude of uses of rosin and rosin based products it cannot be claimed that "there is no or no significant human exposure". It is also noteworthy that the Registrant has not claimed that these criteria of column 2 would apply to the registered substance.

Therefore, due to the reasons explained above, the information provided by third parties is not sufficient to fulfil this information requirement.

c) Outcome

Therefore, pursuant to Article 40(3) of the REACH Regulation, the Registrant is required to carry out the proposed study: Pre-natal developmental toxicity study in rats or rabbits, oral route (test method: EU B.31/OECD 414). Depending on whether the result of the proposed OECD 408 studies or available/on-going OECD 422 studies may or may not enable the Registrant to confirm its assumption that Rosin, reaction products with formaldehyde, CAS No 91081-53-7 (EC No 293-659-0) is not more hazardous than Rosin CAS No. 8050-09-7

(EC No. 232-475-7), as explained in section III.0.5. above, the study shall be performed, respectively, on either:

- a) the analogue substance Rosin CAS No. 8050-09-7 (EC No. 232-475-7), or
- b) the substance subject to this decision.

d) 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).

When considering the need for a testing proposal for a pre-natal developmental toxicity study in a second species, the Registrant should take into account the outcome of the pre-natal developmental toxicity study on the first species and all 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 the conditions for adaptations are not fulfilled, 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 the conditions for these adaptations can be fulfilled, he should update his technical dossier by clearly stating the reasons for proposing to adapt the standard information requirement of Annex X, 8.7.2. of the REACH Regulation.

3. Deadline for submitting the required information

In the draft decision communicated to the Registrant, the deadline to provide the requested information was 36 months from the date of adoption of the decision. In his comments on the draft decision of 22 November 2013 the Registrant requested an extension of the timeline to 48 months.

The Registrant put forward several arguments. Firstly, he highlights the complexity of the testing strategy, which requires sequential testing for several endpoints and substances, and thereafter reassessment of the read-across and category approach in view of the results. Secondly, in order to minimise variability and facilitate interpretation of data for the category the Registrant intends to perform the tests in the same testing facility.

Considering the complexity of the overall testing strategy, number of tests to be performed and need for sequential testing, ECHA concludes that there are justified reasons to extend the deadline. Therefore, the deadline was extended to 48 months in the draft decision communicated to the Member State Competent Authorities. This deadline took into account the fact that the draft decision also requested a reproductive toxicity study (Annex X, 8.7.3). As the testing proposal for this study is not addressed in the present decision, ECHA considers that a reasonable time period for performing the remaining test(s) is 36 months from the date of the adoption of the decision. Therefore, ECHA changed the deadline from 48 months to 36 months.

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, or the information submitted by other registrants of the same 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 proposed tests, 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 of the same substance to agree to the tests proposed (as applicable to their tonnage level) 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. General requirements for the generation of information and Good Laboratory Practice

ECHA reminds registrants of the requirements of Article 13(4) of the REACH Regulation that ecotoxicological and toxicological tests and analyses shall be carried out in compliance with the principles of good laboratory practice (GLP).

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 or to other international test methods recognised as being appropriate and use the applicable test methods to generate the information on the endpoints indicated above.

VI. 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://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.



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