~~Confidential~~

Helsinki, 12 January 2021

Addressee: [redacted]

Decision number: CCH-D-2114538427-44-01/F
Substance name: 1,1,1,3,5,5,5-heptamethyltrisiloxane
EC number: 217-496-1
CAS number: 1873-88-7
Registration number: [redacted]
Submission number subject to follow-up evaluation: [redacted]
Submission date subject to follow-up evaluation: 24 July 2019

DECISION TAKEN UNDER ARTICLE 42(1) OF THE REACH REGULATION

By decision CCH-D-2114362615-47-01/F of 19 July 2017 ("the original decision") ECHA requested you to submit information by 26 July 2019 in an update of your registration dossier.

Based on Article 42(1) of Regulation (EC) No 1907/2006 (the 'REACH Regulation'), ECHA examined the information you submitted with the registration update specified in the header above, and concludes that

Your registration still does not comply with the following information requirement(s):

Extended one-generation reproductive toxicity study (Annex IX, Section 8.7.3.; test method: EU B.56./OECD TG 443) in rats, oral route with the registered substance specified as follows:

- **Ten weeks premating exposure duration for the parental (P0) generation;**
- **Dose level setting shall aim to induce some toxicity at the highest dose level;**
- **Cohort 1A (Reproductive toxicity);**
- **Cohort 1B (Reproductive toxicity) without extension to mate the**
- **Cohort 1B animals to produce the F2 generation.**

You are therefore still required to provide this information requested in the original decision.

The reasons of this decision are set out in Appendix 1. The procedural history is described in Appendix 2. Advice and further observations are provided in Appendix 3.

The respective Member State competent authority (MSCA) and National enforcement authority (NEA) will be informed of this decision. They may consider enforcement actions to secure the implementation of the original decision and exercise the powers reserved to them under Article 126 of Regulation No 1907/2006 (penalties for non-compliance)[1].

[1] See paragraphs 61 and 114 of the judgment of 8 May of the General Court of the European Court of Justice in Case T-283/15 Esso Raffinage v. ECHA

Appeal

This decision can be appealed to the Board of Appeal of ECHA within three months of its notification. An appeal, together with the grounds thereof, shall be submitted to ECHA in writing. An appeal has suspensive effect and is subject to a fee. Further details are described under http://echa.europa.eu/regulations/appeals.

Approved[2] under the authority of Christel Schilliger-Musset, Director of Hazard Assessment

[2] As this is an electronic document, it is not physically signed. This communication has been approved according to ECHA's internal decision-approval process.

Appendix 1: Reasons

Extended one-generation reproductive toxicity study (Annex IX, Section 8.7.3.)

You were requested to submit information derived with the registered substance ('the Substance') for extended one-generation reproductive toxicity (EOGRT).

In the updated registration subject to follow-up evaluation, you have provided an adaptation stating that study is scientifically not necessary:

"There is no evidence of any adverse reproductive effects on reproductive organs or tissues or other concerns in relation to reproductive toxicity in the existing repeated dose toxicity (oral and inhalation) and reproductive toxicity studies with the registered substance and a relevant surrogate substance (octamethyltrisiloxane, L3; read-across accepted in Final decision number TPE-D-2114424726-47-01/F). Some effects in pups were observed in a Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test with the registered substance but these were considered to be secondary non-specific effects due to maternal effects and inability of the dams to feed the pups. Close scrutiny of the maternal food consumption data reveals that affected pups had dams with significantly reduced food consumption. In addition, a pre-natal developmental toxicity study (OECD 414) with the surrogate substance L3 has been conducted and did not demonstrate any effects on development. Therefore, it is considered that the EOGRT required in ECHA decision CCH-D-2114362615-47-01/F is not necessary, due to absence of effects of concern in repeated dose, reproduction and developmental toxicity tests."

We have assessed this information and identified the following issues:

As explained in the original decision, an EOGRT study is required if the available repeated-dose studies indicate adverse effects or concerns related to reproductive toxicity.

You consider that no adverse effects on reproductive organs or tissues have been observed in the available repeated dose toxicity studies, and that these studies do not reveal other concerns in relation with reproductive toxicity. You explain that the effects observed in pups *"were considered to be secondary non-specific effects due to maternal effects and inability of the dams to feed the pups. Close scrutiny of the maternal food consumption data reveals that affected pups had dams with significantly reduced food consumption."* Finally, you refer to existing information with *"a relevant surrogate substance (octamethyltrisiloxane, L3; read-across accepted in Final decision number TPE-D-2114424726-47-01/F)."* and consider that *"a pre-natal developmental toxicity study (OECD 414) with the surrogate substance L3 has been conducted and did not demonstrate any effects on development."*

OECD TG 422 with the Substance: concerns in relation with reproductive toxicity

As explained in the original decision, ECHA considers that concerns in relation with reproductive toxicity are observed in the available studies. More specifically, in the OECD TG 422 study provided in the dossier, reduced survival of offspring and reduced body weight of offspring were identified.

For the dams' food consumption during lactation days 1-4, you report a mean value of 22.8 g/animal/day for the control group (range 17.4 – 27.0 g/animal/day). For the high dose dams (group 4: 800 mg/kg), you report a mean value of 29.3 g/animal/day in the 'OECD 422 Summary data and individual data.pdf' file attached in IUCLID section 7.8.1, and a mean value of 23.3 g/animal/day in the [redacted] file attached in IUCLID section 7.8.2.

Nevertheless, this information shows that on a group level, the mean maternal food consumption of group 4 animals was higher than in the control animals.

According to the attachment 'OECD 422 Summary data and individual data.pdf', the affected litters with post-natal losses were litter numbers 71, 72, 77 and 80. The food consumption during lactation for these dams was reported to be 26.4, 11.7, 83.5 and 22.9 g/animal/day, respectively.

ECHA notes that the individual data does not support the claim that *"affected pups had dams with significantly reduced food consumption"*:

- For the post-natal loss in high dose group, no linkage to maternal food consumption is noted. For example, during lactation days 1-4, dam #71 had a food consumption of 26.4 g/day (close to the upper end of the range of control group food consumption, 17.4–27.0 g/animal/day), however the litter was affected with two post-natal losses. On the contrary, dam #78 had a food consumption of 17.1 g/day, i.e. slightly below the range of control group food consumption, but this litter was not affected.
- There were no differences between the control and the high dose group pup body weights on PND 1: the mean weight was 5.9 g for both groups. On PND 4, the mean pup body weight for control group was 8.1 g, and for the high dose group 7.2 g. However, as explained above, the dams in the high dose group had an increased mean food consumption compared to the control group. No linkage between individual maternal food consumption and lower pup body weight is noted within the high dose group. For example, mean body weights of pups in litters 71 and 72 on PND 4 were 5.9 g and 5.6 g, respectively. The food consumption of dams #71 and #72 were 26.4 and 11.7 g/animal/day, respectively.

OECD TG 414 with the surrogate substance L3

Decision TPE-D-2114424726-47-01/F for 1,1,1,3,5,5,5-heptamethyltrisiloxane (EC No. 217-496-1) requested a pre-natal developmental toxicity study (OECD TG 414) using the analogue substance octamethyltrisiloxane (EC No. 203-497-4). A study according to OECD TG 414 investigates pre-natal developmental toxicity but it does not investigate post-natal development. Hence, even though you claim that the study "*did not demonstrate any effects on development*", it does not negate the above-mentioned findings observed in the pups post-natally in the provided OECD TG 422 study with the Substance.

Conclusion

An EOGRT study according to OECD TG 443 as specified in the original decision is an information requirement for your registration, because Column 1 criteria at Annex IX, section 8.7.3 are met.

As detailed above, the request in the original decision was not met, and you are still required to provide information on the extended one-generation reproduction study in rats, oral route (Annex IX, Section 8.7.3); test method: EU B.56./OECD TG 443 with the Substance.

Appendix 2: Procedural history

In accordance with Article 42(1) of the REACH Regulation, the Agency examined the information submitted by you in consequence of decision CCH-D-2114362615-47-01/F. The Agency considered that this information did not meet one or more of the requests contained in that decision. Therefore, a new decision-making process was initiated under Article 41 of the REACH Regulation.

For the purpose of the decision-making, this decision does not take into account any updates of your registration after the date when the draft of this decision was notified to the Member States Competent Authorities according to Article 51(1) of the REACH Regulation.

The decision making followed the procedure of Articles 50 and 51 of the REACH Regulation, as described below:

ECHA notified you of the draft decision and invited you to provide comments.

ECHA did not receive any comments within the notification period.

ECHA notified the draft decision to the competent authorities of the Member States for proposals for amendment.

As no amendments were proposed, ECHA adopted the decision under Article 51(3) of REACH.

Appendix 3: Further information, observations and technical guidance

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

2. The Article 42(2) notification for the original decision is on hold until all information requested in the original decision has been received.