Helsinki, 19 December 2016

Addressee: [redacted]

Decision number: CCH-D-2114350597-41-01/F
Substance name: Sodium dimethyldithiocarbamate
EC number: 204-876-7
CAS number: 128-04-1
Registration number: [redacted]
Submission number: [redacted]
Submission date: 10.11.2010

DECISION ON A COMPLIANCE CHECK

Based on Article 41 of Regulation (EC) No 1907/2006 (the 'REACH Regulation'), ECHA requests you to submit information on

1. **Pre-natal developmental toxicity study (Annex IX, Section 8.7.2; test method: EU B.31/OECD TG 414) in a first species (rats or rabbits), oral route with the registered substance;**

2. **Long-term toxicity testing on fish (Annex IX, Section 9.1.6.1; test method: Fish, early-life stage (FELS) toxicity test, OECD TG 210) with the registered substance;**

3. **Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5; test method: Daphnia magna reproduction test, EU C.20/OECD TG 211) with the registered substance;**

4. **Short-term toxicity to plants (Annex IX, Section 9.4.3. test method: Terrestrial plants, growth test, OECD TG 208), with at least three species tested (with as a minimum one monocotyledonous species and two dicotyledonous species) with the registered substance;**

5. **Effects on soil micro-organisms (Annex IX, Section 9.4.2.; test method: Soil microorganisms: nitrogen transformation test, EU C.21/OECD TG 216) with the registered substance;**

6. **Identification of DNELs and risk characterisation (Annex I, Section 1.4. and 6.): revise DNELs for workers for systemic effects for short-term dermal route and long-term dermal and inhalation route using the assessment factors of ECHA Guidance R.8 for DNEL derivation and revise the risk characterisation accordingly or provide a detailed justification for not using the recommendations of ECHA Guidance R.8 for DNEL derivation.**

7. **Exposure assessment and risk characterisation (Article 14(6), Annex I, Section 5.1.1., in conjunction with Annex II, 0.1.2. and 8.2.2.2. (b)(i) and 6.) for human health of industrial workers via dermal route: hand protection: specify the type of glove material, thickness and breakthrough times.**

You 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 and conforming to the appropriate rules in the respective Annex, and an adequate and reliable documentation.

You are required to submit the requested information in an updated registration dossier by **26 September 2018**. You shall also update the chemical safety report, where relevant. The timeline has been set to allow for sequential testing.

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.

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.

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

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

Appendix 1: Reasons

1. Pre-natal developmental toxicity study (Annex IX, Section 8.7.2.) in the first species

Pursuant to Articles 10(a)(vi) and/or (vii), 12(1)(d) and 13(4) of the REACH Regulation, a technical dossier registered at 100 to 1000 tonnes per year shall contain as a minimum the information specified in Annexes VII to IX of the REACH Regulation.

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.

You have sought to adapt this information requirement. In the technical dossier you have provided study records for pre-natal developmental toxicity studies (test method: OECD TG 414) in rats and rabbits with the analogue substances [redacted].

In the initial evaluation, ECHA observed that the technical dossier or the Chemical Safety Report did not contain any read-across justification for this standard information requirement. In the absence of any documentation supporting the proposed read-across approach, ECHA considered that you have failed to provide an adequate and reliable documentation of the applied method as required by Annex XI, Section 1.5 of the REACH Regulation.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you provided documentation for your proposed read-across approach which ECHA has taken into consideration, as described in the following paragraphs. According to Annex XI, Section 1.5. there needs to be structural similarity among the substances within a group or category and furthermore, it is required that the relevant properties of a substance within the group may be predicted from data for reference substance(s) within the group (read-across approach). Furthermore, Annex XI, Section 1.5. lists several additional requirements, including that adequate and reliable documentation of the applied method have to be provided.

1.1 Information you provided on read-across

You provided the following hypothesis for the analogue approach: "*The target chemical is sodium dimethyldithiocarbamate (SDDC, CAS No. 128-04-1). SDDC is a salt of dimethyl dithiocarbamic acid (DDC) and capable of dissociating into the respective ions when exposed to water.* [redacted] *- is a compound structurally similar to SDDC* [redacted] *can therefore be considered as source substance for* [redacted]."

In the registration dossier with submission number [redacted] you have provided in IUCLID section 7.8.2. (developmental toxicity) the following study summaries with the source substance [redacted] flagged as "key studies":

- [redacted]*: Oral (Gavage) Teratology Study in the Rabbit*" (GLP, OECD TG 414 with the following deviations: "*Treatment was terminated after gestation day 19. - Mid-dose*

group was inappropriate with only 16 animals and a maternal mortality over 10%"), [redacted] 1986 (study report), rel. 1, NOAEL $_{maternal}$ ≤ 3 mg/kg bw/d; LOAEL $_{maternal}$ 7.5 mg/kg bw/d (slight reduction in body weight gain and food intake); NOAEL $_{development}$ ≤ 7.5 mg/kg bw/d; LOAEL $_{development}$ 15 mg/kg bw/d (slightly increased post-implantation loss and reduced litter weight, foetal weight and crown/rump length);

- "*A Study on the Effect of* [redacted] *on Pregnancy of the Rat*" (GLP, OECD TG 414 with the following deviations: "*Pregnant females arrived at the laboratory 4 days before beginning of exposure. Treatment was terminated after gestation day 15. Gravid uteri were not weighed*"), [redacted] 1990 (study report), rel. 1, NOAEL $_{maternal}$ ≤ 4 mg/kg bw/d; LOAEL $_{maternal}$ 16 mg/kg bw/d (increased water and decreased food consumption); NOAEL $_{development}$ ≤ 4 mg/kg bw/d; LOAEL $_{development}$ 16 mg/kg bw/d (reduced litter and mean foetal weight).

In the registration dossier with submission number [redacted] you have further provided in IUCLID section 7.8.2. (developmental toxicity) three study summaries with the source substance [redacted] flagged as "supporting studies".

In the comments to the draft decision, you indicated that "*within the original bridging statements a further source substance (*[redacted]*was mentioned and results for this substance are also included within the REACH dossier as supporting information for various endpoints. However since* [redacted] *is the most representative species (closest in structural similarity, physico-chemical properties, toxicological and ecotoxicological profiles) only* [redacted] *is now considered as the most appropriate source substance for the target substance SDDC.*" Hence, ECHA has taken into consideration only the information provided for the source substance [redacted].

Within the comments on the draft decision, you provided the following documents which ECHA has taken into account:

- "[redacted]"

1.2 ECHA analysis of the grouping and read-across approach under Annex XI, Section 1.5.

With regard to the proposed predictions ECHA has the following observations:

(i) Chemical structure

You indicated in the section on *"Common origin and similar/overlapping structural features"* in your read-across justification document that *"Both SDDC and [redacted] represent [redacted]. Both belong to the chemical class of [redacted] [...] the target SDDC and the source substance [redacted] share a common structure as they represent [redacted]) that are capable of dissociating into respective ions when exposed to water. Both belong to the chemical class of [redacted] contains a [redacted]."*

ECHA acknowledges the potential formation of a common metabolite ([redacted]). However, ECHA highlights the structural differences of the parent compounds. More specifically, the target substance SDDC is a [redacted] whereas [redacted] consists of [redacted]. The target substance does not include [redacted]. ECHA notes that the structural differences of source and target substances may be associated with the relevant differences in the toxicity profile as explained below under *iv)* and *v)*.

Therefore, ECHA considers that there is a failure to satisfy the requirement of Annex XI, Section 1.5. with respect to the prediction of human health effects as a consequence of differences in chemical structure of source and target substance.

(ii) Physico-chemical properties

You indicate the similarities of the substance. With respect to the differences you indicated the following: *"The main differences between SDDC and [redacted] are the solubility in water and the octanol/water partition coefficient. These differences can be readily explained by the character of [redacted]. The first is rather ionic in nature whereas the latter is rather covalent. According to the HSAB principle (Hard and Soft Acids and Bases), one can predict that a combination of a soft base and a soft acid ([redacted]) is more resistant to dissociation than a combination of a soft base with a hard acid ([redacted]). This prediction is confirmed by the observed water solubility of [redacted] and SDDC, respectively."*

ECHA acknowledges your conclusion that the main differences between the physico-chemical properties of the source and target substance are on water solubility and the octanol/water coefficient. ECHA considers that this constitutes evidence suggesting that the physico-chemical properties of the source and target substances are not likely to be similar, as a result of structural differences between these substances. ECHA notes that those differences in physico-chemical properties may have significant impact on the toxicokinetic properties and toxicity of the substances as explained below under *iii)*, *iv)* and *v)*.

Therefore, ECHA considers that there is a failure to satisfy the requirement of Annex XI, Section 1.5. with respect to the prediction of human health effects as a consequence of differences in physico-chemical properties of source and target substance.

(iii) Metabolism

You summarise that: "*The metabolic pathways of SDDC and [redacted] converge directly after oral ingestion ([redacted]), due to greatly facilitated protonation of [redacted] by the stomach acid which then disintegrates forming the volatiles [redacted]. To a minor extend, [redacted] is conjugated with [redacted] and glutathione giving rise to urinary metabolites. These conjugation routes are minor pathways as identified [redacted] represent 1.5 – 5.4% of the dose excreted in urine. Conjugation of [redacted] or [redacted] directly with GSH would be catabolized to the cysteine conjugate via the cysteinyl-glycine conjugate which then cyclise, loses H2S to form [redacted] (0.45 – 1.3% in urine). It can be assumed that the difference in molecular weight between [redacted] and SDDC does not affect the metabolism downstream from [redacted] formation.*"

ECHA acknowledges the similarity in the metabolic pathways of SDDC and [redacted] However, similar metabolic pathway on its own is not a sufficient basis to predict the properties of the target substance from the source substance. ECHA notes that you did not provide information characterising the rate and extent of dissociation of the source substance [redacted]. Since [redacted] consists of [redacted] (see *i)*), hydrolysis might not be spontaneous. This might be one reason for the relevant differences in toxicity properties of target and source substance (see *iv)*, *v)*). This also suggests that the toxicological properties of the source and target substances may not only determined by their common metabolites.

Therefore, ECHA considers that for this case similarities based on common break-down products as claimed by you is not sufficient to establish that the source and target substances are likely to have similar toxicological properties. Therefore, ECHA considers that there is a failure to satisfy the requirement of Annex XI, Section 1.5. with respect to the prediction of human health effects as a consequence of metabolic differences of source and target substance.

(iv)Acute and local toxicity

You indicate that: "*The target substance (SDDC) of the analogue approach showed no acute oral and dermal toxicity, whereas oral and inhalative toxicity of the source substance [redacted] could be observed resulting in classification. SDDC has only low skin and eye irritating properties leading to no classification according to CLP criteria, whereas [redacted] is classified for eye damage Cat 1 but is not classified for skin irritation. Moreover, SDDC shows low skin sensitizing properties leading to no classification, whereas [redacted] is classified as a skin sensitizer. Thus, the source substance represents a worst case with regard to local effects compared to the target substance.*"

ECHA notes the higher acute toxic effects of source substance [redacted] compared to the registered substance. More specifically, [redacted] is of higher acute toxicity (LD50 320 mg/kg bw) compared to the registered substance (>2500 mg/kg bw). You indicated "*That might be due to more pronounced local effects of the source substance*". Furthermore, [redacted] is classified as damaging to the eyes and is sensitising to the skin, whereas the target substance is not classified for those properties. This difference in acute and local toxicity of source and target substance is relevant for the identification of systemic, more specifically reproductive, effects (see *v)*).
Therefore, ECHA considers that there is a failure to satisfy the requirement of Annex XI, Section 1.5. with respect to the prediction of human health effects of the target substance

from the source substance as a consequence of acute and local toxicity which has an impact on the identification of hazard(s) related to systemic (including developmental) toxicity (see *v)*).

(v) Systemic (including developmental) toxicity

You indicate that: "*Comparable systemic effects were observed in the subchronic and chronic oral repeated dose toxicity studies performed with SDDC ([redacted]% solution) and [redacted]. Due to the generally lower NOAEL values read-across from [redacted] is expected to present a worst case when establishing systemic effect levels of SDDC.*"

ECHA acknowledges that comparable systemic effects were observed in the repeated dose toxicity studies performed with the target substance and the source substance [redacted]. However, ECHA also notes the differences observed in acute and local toxicity (see *iv)*) and in systemic toxicity of the substances. Due to the higher acute and local toxicity of [redacted], dosing is limited (e.g., up to 77 mg/kg bw/day) and is leading to significant reduction in body weight gain. With the target substance SDDC, dosing was possible up to 250 mg/kg bw/day without significant effects on body weight gain.

With respect to developmental toxicity, ECHA observes that indications for developmental toxicity can be seen in the pre-natal developmental toxicity study with [redacted] in rats (e.g., thinning of diaphragmn) and in rabbits (high post-implantation loss). You have also provided QSAR profiling indicating that the target and the source substance are "*known precedent reproductive and developmental toxic potential*". Hence, ECHA considers that there is concern for pre-natal developmental toxicity of the target substance. Since the target substance can be administered at higher doses than [redacted], potential developmental effects might be identified more clearly than in the studies with [redacted]. Hence, to detect effects on developmental toxicity of the target substance in relation to maternal toxicity, [redacted] might not present a worst case.

Therefore, ECHA considers that there is a failure to satisfy the requirement of Annex XI, Section 1.5. with respect to the prediction of human health effects of the target substance from the source substance with respect to pre-natal developmental toxicity.

1.3 Conclusion on your read-across approach

The adaptation of the standard information requirements for the endpoints pre-natal developmental toxicity study in the technical dossier is based on the proposed read-across approach examined above. ECHA does not consider the proposed read-across approach to be a reliable basis to predict the properties of the target substance for the reasons set out above. Thus, the adaptation does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. Therefore, ECHA rejects the adaptation for pre-natal developmental toxicity in the technical dossier that is based on Annex XI, Section 1.5.

1.4 Conclusion on the endpoint and test method specification

As explained, the information provided 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 TG 414, the rat is the preferred rodent species and the rabbit the preferred non-rodent species. On the basis of this default consideration, ECHA considers testing should be performed with rats or rabbits as a first species.

According to the test method EU B.31./OECD TG 414, the test substance is usually administered orally. On the basis of this default consideration, ECHA considers testing should be performed by the oral route.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are 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 TG 414) in a first species (rats or rabbits) by the oral route.

2. Long-term toxicity testing on fish (Annex IX, Section 9.1.6.1.)

Pursuant to Articles 10(a)(vi) and/or (vii), 12(1)(d) and 13(4) of the REACH Regulation, a technical dossier registered at 100 to 1000 tonnes per year shall contain as a minimum the information specified in Annexes VII to IX of the REACH Regulation.
"Long-term toxicity testing on fish" is a standard information requirement as laid down in Annex IX, Section 9.1.6. of the REACH Regulation. Adequate information on Fish, early-life stage (FELS) toxicity test (Annex IX, 9.1.6.1.), or Fish, short-term toxicity test on embryo and sac-fry stages (Annex IX, 9.1.6.2.), or Fish, juvenile growth test (Annex IX, 9.1.6.3.) needs to be present in the technical dossier for the registered substance to meet this information requirement.

Column 2 of Annex IX, Section 9.1. specifies that long-term aquatic toxicity testing shall be proposed by the Registrant if the chemical safety assessment according to Annex I indicates the need to investigate further effects on aquatic organisms. The choice of the appropriate test(s) will depend on the results of the chemical safety assessment.

ECHA notes that the information you have included in the dossier with respect to aquatic toxicity are a short-term toxicity test on fish, a short-term toxicity test on aquatic invertebrates and toxicity test with Algae, all conducted with the registered substance, and in addition a long-term toxicity test on aquatic invertebrates and a long-term toxicity test on fish, both conducted with the alleged read-across substance [redacted]. Furthermore, ECHA observes that you have derived the Predicted No-Effect Concentrations (PNECs) for fresh- and marine water from the results obtained with the long-term aquatic toxicity tests.

Regarding the proposed read-across, ECHA underlines that while in the Chemical Safety Report (CSR) you indicated "*see endpoint summary for justification of read-across*", ECHA could not find any read-across justification document in the registration dossier for the read-across from the claimed analogue substance [redacted]. In the absence of any documentation supporting the proposed read-across approach, ECHA considered that you have failed to provide an adequate and reliable documentation of the applied method as required by Annex XI, Section 1.5 of the REACH Regulation.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you provided documentation for your read-across approach which ECHA has examined pursuant to Annex XI, Section 1.5 of the REACH Regulation.

You provided the following hypothesis for the analogue approach: "*The target chemical is sodium dimethyldithiocarbamate (SDDC, CAS No. 128-04-1). SDDC is a* [redacted] *and capable of dissociating into the respective ions when exposed to water.* [redacted]

In the registration dossier with submission number [redacted] you have provided in IUCLID section 6.1.2. (long-term toxicity to fish) the study summary with the source substance Ziram flagged as "key study".

Within the comments on the draft decision, you provided the following documents which ECHA has taken into account:

- [redacted]

Summarising results of prediction of possible metabolites formed via hydrolysis you indicated that "*Simulated hydrolysis metabolites/ products of* [redacted] *and thus of SDDC,* [redacted]*, are also metabolites/ products of* [redacted]*. Thus by subsequent metabolic processes, the same metabolites can be generated. This confirms that neither in environmental conditions, nor in human body, SDDC is likely to be metabolized into a reaction product which is not obtainable as a result of* [redacted] *metabolism/ hydrolysis. The opposite is not possible because of a possible presence of* [redacted] *and compounds containing* [redacted]*.*"

First, ECHA highlights the structural differences of the parent compounds. More specifically, the target substance SDDC is a [redacted] whereas [redacted] consists of [redacted]. The target substance does not include [redacted]. ECHA notes that the structural differences of the source and target substances may be associated with the relevant differences in the toxicity profile.

Second, ECHA observes that the hydrolysis half-lifes of both target and source substances are dependent on pH of the medium. Hydrolysis half-lifes, based on results of experimental study, of the [redacted] reported in the documentation provided to support comments on the draft decision are following: pH 5 - 10.4 min.; pH 7 - 17.67 h; pH 9 - 6.31 d.

ECHA notes that the pH of the medium reported in the registration dossier for the long-term fish toxicity study with [redacted] is 8.0-8.1. Furthermore, it is reported that the flow-through design of the test has been used and that the concentrations of the parent substance (i.e. [redacted] were verified on days 0, 7, 14, 21, 28 and 33 (test termination), and were maintained throughout the experiment.

Third, ECHA understands that the proposed read-across hypothesis is driven by a common metabolite(s) for the source and target substances. ECHA acknowledges the potential formation of a common metabolite ([redacted]) by both the source and target substances. Under relevant conditions, i.e. when the [redacted] released in the test medium has sufficient time to hydrolyse into [redacted] could be used as a source substance for predicting ecotoxicity of the registered substance as the prediction could be considered as the worst-case scenario.

However, the above hypothesis is not addressed by the the long-term fish toxicity study provided by the Registrant. More specifically, in the long-term fish toxicity study with [redacted] reported in the registration dossier, the toxicity of the parent substance (source) and not of the hydrolysis products ([redacted] with "*only minor metabolites identified which are not relevant for SDDC")* has been tested. Thus, provided information for [redacted] on long-term fish toxicity does not address the long-term fish toxicity of the registered substance.

The adaptation of the standard information requirements for the endpoint long-term toxicity testing on fish is based on the proposed read-across approach examined above. ECHA does not consider the information reported in the dossier to be a reliable basis to predict the properties of the target substance for the reasons set out above. Thus, the adaptation does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. Therefore, ECHA rejects the adaptation for long-term toxicity testing on fish in the technical dossier that is based on Annex XI, Section 1.5.

Furthermore, ECHA notes that the risk characterisation based on the short-term aquatic toxicity data with the registered substance available in the registration dossier would indicate a risk, i.e. for some ESs (e.g. ES 3 and ES 4), the predicted environmental concentrations reported in the CSR would become above PNECs for fresh and marine waters based on short-term aquatic toxicity data with the registered substance. Consequently ECHA concludes that the risk characterisation done according to Annex I indicates the need to investigate further effects on aquatic organisms and long-term aquatic toxicity testing is necessary.

Therefore, ECHA concludes that long-term fish toxicity testing is necessary.
As explained above, the information provided 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.

Regarding appropriate test method, according to ECHA *Guidance on information requirements and chemical safety assessment, Chapter R.7b* (version 3.0, February 2016) fish early-life stage (FELS) toxicity test (test method OECD TG 210), fish short-term toxicity test on embryo and sac-fry stages (test method EU C.15. / OECD TG 212) and fish juvenile growth test (test method EU C.14. / OECD TG 215) are the preferred tests to cover the standard information requirement of Annex IX, Section 9.1.6.

However, the FELS toxicity test according to OECD TG 210 is more sensitive than the fish, short-term toxicity test on embryo and sac-fry stages (test method EU C.15 / OECD TG 212), or the fish, juvenile growth test (test method EU C.14. / OECD TG 215), as it covers several life stages of the fish from the newly fertilized egg, through hatch to early stages of growth (see ECHA *Guidance on information requirements and chemical safety assessment* (version 3.0, February 2016), *Chapter R7b, Figure R.7.8-4).*

Moreover, the FELS toxicity test is preferable for examining the potential toxic effects of substances which are expected to cause effects over a longer exposure period, or which require a longer exposure period of time to reach steady state (ECHA *Guidance Chapter R7b,* version 3.0, February 2016).

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Fish, early-life stage (FELS) toxicity test (test method: OECD TG 210).

3. Long-term toxicity testing on aquatic invertebrates (Annex IX, Section 9.1.5.)

Pursuant to Articles 10(a)(vi) and/or (vii), 12(1)(d) and 13(4) of the REACH Regulation, a technical dossier registered at 100 to 1000 tonnes per year shall contain as a minimum the information specified in Annexes VII to IX of the REACH Regulation.

"Long-term toxicity testing on aquatic invertebrates" is a standard information requirement as laid down in Annex IX, Section 9.1.5. 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.
Column 2 of Annex IX, Section 9.1. specifies that long-term aquatic toxicity testing shall be proposed by the Registrant if the chemical safety assessment according to Annex I indicates

the need to investigate further effects on aquatic organisms. The choice of the appropriate test(s) will depend on the results of the chemical safety assessment.

ECHA notes that the information you have included in the dossier with respect to aquatic toxicity are a short-term toxicity test on fish, a short-term toxicity test on aquatic invertebrates and toxicity test with Algae, all conducted with the registered substance, and in addition a long-term toxicity test on aquatic invertebrates and a long-term toxicity test on fish , both conducted with the alleged read-across substance [redacted]. Furthermore, ECHA observes that you have derived the Predicted No-effect Concentrations (PNECs) for fresh- and marine water from the results obtained with the long-term aquatic toxicity tests.

Regarding the proposed read-across, ECHA underlines that while in the Chemical Safety Report (CSR) you indicated "*see endpoint summary for justification of read-across*", ECHA could not find any read-across justification document in the registration dossier for the read-across from the claimed analogue substance [redacted]. In the absence of any documentation supporting the proposed read-across approach, ECHA considered that you have failed to provide an adequate and reliable documentation of the applied method as required by Annex XI, Section 1.5 of the REACH Regulation.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you provided documentation for your read-across approach which ECHA has examined pursuant to Annex XI, Section 1.5 of the REACH Regulation.

ECHA notes that the pH of the medium reported in the registration dossier for the long-term aquatic invertebrates toxicity study with [redacted] is 7.9-8.2. Furthermore, it is reported that the flow-through design of the test has been used and that the concentrations of the parent substance (i.e[redacted] were verified on days 0, 7, 14, 17 and 21, and were maintained throughout the experiment.

As summarised under section 2 above, ECHA considers that under relevant conditions, i.e. when the [redacted] released in the test medium has sufficient time to hydrolyse into [redacted] could be used as a source substance for predicting ecotoxicity of the registered substance as the prediction could be considered as the worst-case scenario.

However, the above hypothesis is not addressed by the long-term fish toxicity study provided by the Registrant. More specifically, in the long-term aquatic invertebrates toxicity study with [redacted] reported in the registration dossier the toxicity of the parent substance (source), and not of the hydrolysis products [redacted] with "*only minor metabolites identified which are not relevant for SDDC"),* has been tested. Thus, provided information for [redacted] on long-term aquatic invertebrates toxicity does not address the long-term aquatic invertebrates toxicity of the registered substance.

The adaptation of the standard information requirements for the endpoint long-term toxicity testing on aquatic invertebrates is based on the proposed read-across approach examined above. ECHA does not consider the information reported in the dossier to be a reliable basis to predict the properties of the target substance for the reasons set out above. Thus, the adaptation does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. Therefore, ECHA rejects the adaptation for long-term toxicity testing on aquatic invertebrates in the technical dossier that is based on Annex XI, Section 1.5.

Furthermore, ECHA notes that the risk characterisation based on the short-term aquatic toxicity data with the registered substance would indicate a risk, i.e. for some ESs (e.g. ES 3 and ES 4), the predicted environmental concentrations reported in the CSR would become above PNECs for fresh and marine waters based on short-term aquatic toxicity data with the registered substance. Consequently ECHA concludes that the risk characterisation done according to Annex I indicates the need to investigate further effects on aquatic organisms and long-term aquatic toxicity testing is necessary.

Therefore, ECHA concludes that long-term aquatic invertebrates toxicity testing is necessary.
As explained above, the information provided 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.

ECHA considers that *Daphnia magna* reproduction test (test method: EU C.20./OECD TG 211) is suitable and appropriate to address the standard information requirement of Annex IX, Section 9.1.5. of the REACH Regulation.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: *Daphnia magna* reproduction test (test method: EU C.20./OECD TG 211).

Notes for your consideration

Before conducting any of the tests mentioned above in points 2-3 you shall consult the ECHA *Guidance on information requirements and chemical safety assessment (version 2.0, November 2014)*, Chapter R7b, Section R.7.8.5 to determine the sequence in which the aquatic long-term toxicity tests are to be conducted and the necessity to conduct long-term toxicity testing on fish.

According to ECHA *Guidance on information requirements and chemical safety assessment* (version 2.0, November 2014), Chapter R7b (Section R.7.8.5., including Figure R.7.8-4), if based on acute aquatic toxicity data neither fish nor invertebrates are shown to be substantially more sensitive, long-term studies may be required on both. In such case, according to the integrated testing strategy, the *Daphnia* study is to be conducted first. If based on the results of the long-term *Daphnia* study and the application of a relevant assessment factor, no risks are observed (PEC/PNEC<1), no long-term fish testing may need to be conducted. However, if a risk is indicated, the long-term fish study needs to be conducted.

Due to the possibility of fast hydrolysis of the substance under acidic conditions you should consult OECD Guidance Document on Aquatic Toxicity Testing of Difficult Substances and

Mixtures, ENV/JM/MONO (2000) and ECHA Guidance, Chapter R7b, table R. 7.8-3 summarising aquatic toxicity testing of difficult substances for choosing the design of the requested long-term aquatic toxicity tests and for calculation and expression of the result of these tests.

4. Short-term toxicity to plants (Annex IX, Section 9.4.3.)

Pursuant to Articles 10(a)(vi) and/or (vii), 12(1)(d) and 13(4) of the REACH Regulation, a technical dossier registered at 100 to 1000 tonnes per year shall contain as a minimum the information specified in Annexes VII to IX of the REACH Regulation.

"Effects on terrestrial organisms" is a standard information requirement as laid down in Annex IX, Section 9.4. of the REACH Regulation. Adequate information on effects on short-term toxicity to invertebrates (Annex IX, Section 9.4.1.), effects on soil micro-organisms (Annex IX, Section 9.4.2.), and short-term toxicity to plants (Annex IX, Section 9.4.3.) needs to be present in the technical dossier for the registered substance to meet the information requirements.

ECHA observes that you have included in the registration dossier the following terrestrial plant toxicity tests conducted with the claimed read-across substance [redacted]: a Terrestrial Plant Toxicity Tier I ((seedling emergence) EPA OPP 122-1) test where 10 species were tested (4 monocotyledonous and 6 dicotyledonous) and a Terrestrial Plant Toxicity Tier I ((vegetative vigor) EPA OPP 122-1) test where 10 species were tested (4 monocotyledonous and 6 dicotyledonous).

Nevertheless ECHA underlines that while in the Chemical Safety Report (CSR) you indicated "*see endpoint summary for justification of read-across*", ECHA could not find any read-across justification document in the registration dossier for the read-across from the claimed analogue substance [redacted]. In the absence of any documentation supporting the proposed read-across approach, ECHA considered that you have failed to provide an adequate and reliable documentation of the applied method as required by Annex XI, Section 1.5 of the REACH Regulation.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you provided documentation for your read-across approach which ECHA has examined pursuant to Annex XI, Section 1.5 of the REACH Regulation.

As summarised under section 2 above, ECHA considers that under relevant conditions, i.e. when the [redacted] released in the test medium has sufficient time to hydrolyse [redacted] could be used as a source substance for predicting ecotoxicity of the registered substance as the prediction could be considered as the worst-case scneario.

Specifically for the terrestrial toxicity you noted following: "*This read-across approach is considered appropriate as firstly:* [redacted] *hydrolyses rapidly in aqueous solution or with soil moisture to* [redacted] *and secondly, since also after oral uptake, comparable (or to a large extent) identical hydrolysis products are being produced.*"
ECHA observes that the hydrolysis half-lifes of both target and source substances are dependant on pH of the medium. Hydrolysis half-lifes, based on results of experimental study, of the [redacted] reported in the documentation provided to support comments on the draft decision are following: pH 5 - 10.4 min.; pH 7 - 17.67 h; pH 9 - 6.31 d. Furthermore,

the biodegradation half-life of the [redacted] in soil (aerobic conditions) reported in the documentation provided to support comments on the draft decision is <1 h – 1.7 d.

ECHA notes that in the soil plants toxicity tests carried out with [redacted] (at substrate pH of 7.3) "[redacted] *were determined by* [redacted] *evolution method*", i.e. analytical confirmation has been based on the measurements of metabolite ([redacted]. This indicates transformation of the parent substance [redacted] into metabolites during the experiment and therefore, in the study reported in the dossier toxicity of the metabolites of [redacted] is also addressed.

However, ECHA notes that details of analytical monitoring (e.g. on which days of the experiment formation of [redacted] has been verified and what are the quantitative results of those verifications) in the soil plants toxicity studies are missing from the registration dossier. Moreover, formation of the relevant degradation products in the soil via (bio)degradation cannot be confirmed from the information reported in the registration dossier of the target substance and in the comments on the draft decision. Therefore, there is uncertainty whether or not results of provided soil plants toxicity studies with [redacted] are addressing the soil plants toxicity of the registered substance (its metabolites) or of the [redacted] (or some specific metabolites not relevant for the registered substance).

Thus, ECHA cannot conclude that provided information for [redacted] on soil plants toxicity addresses the soil plants toxicity of the registered substance.

The adaptation of the standard information requirements for the endpoint short-term toxicity to soil plants is based on the proposed read-across approach examined above. ECHA does not consider the information reported in the dossier to be a reliable basis to predict the properties of the target substance for the reasons set out above. Thus, the adaptation does not comply with the general rules of adaptation as set out in Annex XI, Section 1.5. Therefore, ECHA rejects the adaptation for short-term toxicity to soil plants in the technical dossier that is based on Annex XI, Section 1.5.

Based on the data provided in the registration dossier ECHA notes that the registered substance is not persistent, not highly adsorptive, nevertheless is very toxic to aquatic organisms (the lowest EC50 from the aquatic toxicity testing with the registered substance is 0.25 mg/L). Thus, based upon the available aquatic toxicity information and the physico-chemical properties of the substance and in relation to section R.7.11.6., Chapter R.7c of the ECHA *Guidance on information requirements and chemical safety assessment* (version 2.0, November 2014), ECHA considers that the substance would fall into soil hazard category 2. In the context of an integrated testing strategy for soil toxicity, the Guidance advocates performing an initial screening assessment based upon the Equilibrium Partitioning Method (EPM), together with a confirmatory short-term soil toxicity test. The PNECscreen is calculated through EPM on the basis of aquatic toxicity data only.

Furthermore, according to the Guidance on information requirements and substance safety assessment, Chapter R.10 (May 2008, p. 41) "*if only one terrestrial test result is available (earthworms or plants), the risk assessment should be performed both of this test result and on the basis of outcome of the aquatic toxicity data to provide an indication of the risk. As a matter of precaution, the larger $PEC_{soil}/PNEC_{soil}$ ratio determines which further actions should be taken in the framework of the further testing strategy*."

ECHA observes that in this case there is only one short-term toxicity test with earthworms with the registered substance available in the registration dossier and, consequently, soil risk assessments should be based on the result of this study and aquatic toxicity data through the application of the EPM. ECHA notes that the screening assessment for the soil compartment based on the short-term aquatic toxicity data with the registered substance indicates a risk, i.e. for some ESs (e.g. ES 2), some predicted environmental concentrations for soil reported in the CSR would become above the PNEC for soil (estimated through the application of the EPM).

Therefore, the screening assessment conducted for the soil compartment through the EPM method based on aquatic toxicity data indicates a potential risk for the soil compartment. Consequently ECHA concludes that the risk characterisation done according to Annex I indicates the need to investigate further effects on terrestrial organisms and short-term terrestrial toxicity testing is necessary.

According to the Guidance on information requirements and substance safety assessment, Chapter R.7c, Table R.7.11-2 (November 2014), when a risk is indicated through the screening assessment, short-term toxicity tests according to the standard information requirements of Annex IX (invertebrates, micro-organisms and plants) shall be conducted for the substance falling into soil hazard category 2. Therefore, ECHA concludes that a short-term toxicity testing with plants is necessary.

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

According to ECHA Guidance on information requirements and chemical safety assessment (version 2.0, November 2014), Chapter R.7C, Section R.7.11.3.1) Terrestrial plants, growth test (test method: OECD TG 208) is considered sufficient to fulfil the short-term soil toxicity standard information requirements.

OECD TG guideline 208 (Terrestrial plants, growth test) considers the need to select the number of test species according to relevant regulatory requirements, and the need for a reasonably broad selection of species to account for interspecies sensitivity distribution. For short-term toxicity testing, ECHA considers three species as the minimum to achieve a reasonably broad selection. Testing shall be conducted with species from different families, as a minimum with one monocotyledonous species and two dicotyledonous species, selected according to the criteria indicated in the OECD TG 208 guideline. You should consider if testing on additional species is required to cover the information requirement.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Terrestrial plants, growth test (test method: OECD TG 208), with at least three species tested (with as a minimum one monocotyledonous species and two dicotyledonous species).

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

Pursuant to Articles 10(a)(vi) and/or (vii), 12(1)(d) and 13(4) of the REACH Regulation, a technical dossier registered at 100 to 1000 tonnes per year shall contain as a minimum the information specified in Annexes VII to IX of the REACH Regulation.

"Effects on terrestrial organisms" is a standard information requirement as laid down in Annex IX, Section 9.4. of the REACH Regulation. Adequate information on effects on short-term toxicity to invertebrates (Annex IX, Section 9.4.1.), effects on soil micro-organisms (Annex IX, Section 9.4.2.), and short-term toxicity to plants (Annex IX, Section 9.4.3.) needs to be present in the technical dossier for the registered substance to meet the information requirements.

With respect to the toxicity to soil microorganisms, ECHA observes that you have included in the registration dossier results of the BBA Part VI, 1-1 test with the claimed read-across substance [redacted].

Nevertheless ECHA underlines that while in the Chemical Safety Report (CSR) you indicated "*see endpoint summary for justification of read-across*", ECHA could not find any read-across justification document in the registration dossier for the read-across from the analogue substance [redacted]. In the absence of any documentation supporting the proposed read-across approach, ECHA considered that you have failed to provide an adequate and reliable documentation of the applied method as required by Annex XI, Section 1.5 of the REACH Regulation.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you provided documentation for your proposed read-across approach which ECHA has examined pursuant to Annex XI, Section 1.5 of the REACH Regulation.

As summarised under section 2 above, ECHA considers that under relevant conditions, i.e. when the [redacted] released in the test medium has sufficient time to hydrolyse into [redacted] could be used as a source substance for predicting ecotoxicity of the registered substance as the prediction could be considered as the worst-case scenario.

Specifically for the terrestrial toxicity you noted following: "*This read-across approach is considered appropriate as firstly:* [redacted] *hydrolyses rapidly in aqueous solution or with soil moisture to* [redacted] *and secondly, since also after oral uptake, comparable (or to a large extent) identical hydrolysis products are being produced.*"

ECHA observes that the hydrolysis half-lifes of both target and source substances are dependant on pH of the medium. Hydrolysis half-lifes, based on results of experimental study, of the [redacted] reported in the documentation provided to support comments on the draft decision are following: pH 5 - 10.4 min.; pH 7 - 17.67 h; pH 9 - 6.31 d. Furthermore, the biodegradation half-life of the [redacted] in soil (aerobic conditions) reported in the documentation provided to support comments on the draft decision is <1 h – 1.7 d.

ECHA observes that in the comments on the draft decision you have reported hydrolysis half-life of the source substance and half-life of biodegradation in soil in aerobic conditions and noted that both reported values are based on experimental results. ECHA notes that study summaries for these studies are not available in the registration dossier of the target substance and half-life/identity of degradation products formed in the soil cannot be confirmed. Furthermore, ECHA notes that in the soil micro-organisms toxicity test carried out with [redacted] no analytical monitoring of the test substance has been performed.

Thus, there is uncertainty whether or not results of provided soil micro-organisms toxicity study with [redacted] are addressing the soil micro-organisms toxicity of the registered substance (its metabolites) or of the [redacted] (or some specific metabolites not relevant for the registered substance).

As explained above under section 4, the screening assessment conducted for the soil compartment through the EPM method based on aquatic toxicity data indicates a potential risk for the soil compartment. Consequently ECHA concludes that the risk characterisation done according to Annex I indicates the need to investigate further effects on terrestrial organisms and short-term terrestrial toxicity testing is necessary.

According to the Guidance on information requirements and substance safety assessment, Chapter R.7c, Table R.7.11-2 (November 2014), when a risk is indicated through the screening assessment, short-term toxicity tests according to the standard information requirements of Annex IX (invertebrates, micro-organisms and plants) shall be conducted for a substance falling into soil hazard category 2. Therefore, ECHA concludes that toxicity testing with micro-organisms is necessary.

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

According to ECHA *Guidance on information requirements and chemical safety assessment* (version 2.0, November 2014), Chapter R.7C, Section R.7.11.3.1., the nitrogen transformation test is considered sufficient for most non-agrochemicals.

Therefore, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to submit the following information derived with the registered substance subject to the present decision: Soil microorganisms: nitrogen transformation test (test method: EU C.21./OECD TG 216).

6. Identification of DNEL(s) and risk characterisation (Annex I, Section 1.4. and 6.)

Pursuant to Articles 10(b) and 14(1) of the REACH Regulation, the registration shall contain a chemical safety report which shall document the chemical safety assessment conducted in accordance with Article 14(2) to (7) and with Annex I of the REACH Regulation.

Annex I, 1.4.1 of the REACH Regulation requires that the following factors shall, among others, be taken into account when deriving DNELs:

a) the uncertainty arising, among other factors, from the variability in the experimental information and from intra- and inter-species variation;
b) the nature and severity of the effect;
c) the sensitivity of the human (sub-)population to which the quantitative and/or qualitative information on exposure applies;
d) and that the DNELs reflect the likely route(s), duration and frequency of exposure.

The ECHA *Guidance on information requirements and chemical safety assessment* Volume 8, Chapter R.8 provides further details and specifically provides default factors which should be applied to derive DNELs in the absence of substance specific information.

ECHA notes that when deriving short-term DNEL for workers for systemic effects via dermal route and long-term DNELs for workers for systemic effects via dermal and inhalation route, you have used data on a proposed analogue substance. However, ECHA observes that the technical dossier or the Chemical Safety Report does not contain any read-across justification. In the absence of any documentation supporting the proposed read-across approach, ECHA considers that you have failed to provide an adequate and reliable documentation of the applied method as required by Annex XI, Section 1.5 of the REACH Regulation. Therefore, ECHA is not in a position to evaluate the proposed read-across approach which could allow establishing that relevant properties of the registered substance can be predicted from those of the analogue substance.ECHA therefore concludes that without a justification in line with the rules of Annex XI, Section 1.5, such read-across data cannot be accepted.

Furthermore, notwithstanding the above conclusion on the read-across approach ECHA notes that when performing route-to-route extrapolation from oral to dermal route you have used an absorption of 0.1% via dermal and 60% via oral exposure. ECHA notes that the comparison of the dermal 21-day study and oral 90-day study NOAELs and LOAELs for that proposed analogue substance does not support an assumption of such a difference in the absorption between the two routes.

As explained above, the information provided on DNELs for the registered substance in the chemical safety report does not meet the general provisions for preparing a chemical safety report as described in Annex I, 1.4.1. Consequently it is necessary to revise the DNELs or to provide a detailed justification.
You are given two options: you shall revise the DNELs for workers and the general population by using data on the registered substance and the recommendations of ECHA Guidance R.8 for DNEL derivation that are appropriate in this case. Subsequently, you shall re-assess related risks.
In the alternative, you shall, in accordance with Annex I, Section 1.4.1, and Annex IX Section 1.5 provide a detailed justification for the DNELs derived for workers and the

general population provided in the chemical safety report by specifying how the following has been taken into account when deriving DNELs from an analogue substance and using the assumed absorption rates:

a) the uncertainty arising, among other factors, from the variability in the experimental information and from intra- and inter-species variation;
b) the nature and severity of the effect;
c) the sensitivity of the human (sub-)population to which the quantitative and/or qualitative information on exposure applies;
d) and that the DNELs reflect the likely route(s), duration and frequency of exposure.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you committed to update the technical dossier and Chemical Safety Report along the lines indicated in the draft decision by either providing a detailed justification of the DNEL derivation or, if applicable, revising the DNELs.

Thus, pursuant to Article 41(1) and (3) of the REACH Regulation, you are requested to revise DNELs for workers for systemic effects for short-term dermal route and long-term dermal and inhalation route using the assessment factors of ECHA Guidance R.8 for DNEL derivation and revise the risk characterisation accordingly *or* provide a detailed justification for not using the recommendations of ECHA Guidance R.8 for DNEL derivation.

Notes for your consideration

The results of the studies requested with this decision shall be taken into account when revising the DNELs.

ECHA notes that you have used ECETOC TRA version 2 in the exposure assessment/risk characterisation while the latest version available is version 3. You should consider using the most updated version of the prediction model when revising the risk characterisation. You should note as well that normally inhalation exposure predicted concentrations shall be reported in mg/m^3 instead of ppm.

7. Exposure assessment and risk characterisation (Article 14(6), Annex I, Section 5.1.1., in conjunction with Annex II, 0.1.2. and 8.2.2.2. (b)(i) and 6.) for human health

Article 14(6) as well as Annex I, 0.1., 5.1.1., 5.2.4. and 6.2. of the REACH Regulation require registrants to identify and apply appropriate measures to adequately control the risks identified in a CSR. The exposure shall be estimated and risks shall be characterised in the CSR under the assumption that relevant risk management measures have been implemented.

According to Annex I, 0.3., 0.5. and 5.1.1. the applied Risk Management Measures (RMM) have to be described in the CSR. The CSR needs to contain sufficient information to allow ECHA to gain assurance that the risks are adequately controlled and that appropriate risk management measures can be prescribed by actors in the supply chain. Accordingly, the supplier is required to describe the relevant RMM in detail in the Safety Data Sheet in order to minimise the exposure for workers handling the registered substance (e.g. the type of gloves to be worn, protection equipment for parts of the body other than the hand or respiratory protection shall be clearly specified based on the hazard of the substance or mixture and potential for contact and with regard to the amount and duration of exposure in accordance with Annex II, section 8.2.2.2.(b)(i), (ii) and 8.2.2.2.(c) respectively). The information provided in the Safety Data Sheet (SDS) shall be consistent with information in the Chemical Safety Report (Annex II, section 0.1.2. of the REACH Regulation).

To ensure the safe use of a substance, Annex I Section 5.1.1 requires a description of the risk management measures to reduce or avoid direct and indirect exposure of humans. Gloves are reported in the CSR as required personal protective equipment to prevent dermal exposure to the substance. Generally, gloves that are capable of preventing exposure to the skin for a pre-determined duration shall be specified. Typically, this information, as a minimum, has to specify the glove material and, depending on the exposure scenarios, may also need to include the breakthrough time and thickness of the glove material.

ECHA notes that specific detailed information on the recommended personal protective equipment is missing both from the CSR and from the information on safe use within the IUCLID dossier. In the CSR, you indicated the following for hand protection: "Wear chemically resistant gloves (tested to EN374): protective glove against chemicals and microorganisms. Example of preferred glove barrier materials:- glove made of nitrile rubber", while in IUCLID Section 11 no detail has been reported.

In your comment(s) on the draft decision according to Article 50(1) of the REACH Regulation you committed to update the Chemical Safety Report along the lines indicated in the draft decision.

Therefore, pursuant to Article 41(1)(c) you are requested to provide documentation for the recommended personal protective equipment, i.e.: Hand protection; further specify the type of glove material, thickness and breakthrough times.

Appendix 2: Procedural history

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 decision was notified to you under Article 50(1) of the REACH Regulation.

The compliance check was initiated on 29 September 2015.

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 took into account your comments, which were sent within the commenting period, and they are reflected in the Reasons (Appendix 1).

ECHA notified the draft decision to the competent authorities of the Member States for proposal(s) for amendment(s).

As no amendments were proposed, ECHA took the decision according to Article 51(3) of the REACH Regulation.

Appendix 3: Further information, observations and technical guidance

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

2. 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 your Member State.

3. In relation to the information required by the present decision, the sample of substance used for the new test(s) must be suitable for use by all the joint registrants. Hence, the sample should have a composition that is suitable to fulfil the information requirement for the substance composition manufactured or imported 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 test(s) 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 or imported by each registrant. If the registration of the substance by any registrant covers different grades, the sample used for the new test(s) 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 test(s) to be assessed.