

**Risk Management Option Analysis Conclusion Document**

**Substance Name:** **N-[(2-methylpropoxy)methyl]acrylamide (NMPMA)**

**EC Number:** **240-715-7**

**CAS Number: 16669-59-3**

**Authority: Swedish Chemicals Agency**

**Date: 24 August 2021**

**DISCLAIMER**

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# Foreword

The purpose of Risk Management Option analysis (RMOA) is to help authorities decide whether further regulatory risk management activities are required for a substance and to identify the most appropriate instrument to address a concern.

RMOA is a voluntary step, i.e., it is not part of the processes as defined in the legislation. For authorities, documenting the RMOA allows the sharing of information and promoting early discussion, which helps lead to a common understanding on the action pursued. A Member State or ECHA (at the request of the Commission) can carry out this case-by-case analysis in order to conclude whether a substance is a 'relevant substance of very high concern (SVHC)' in the sense of the SVHC Roadmap to 2020[[1]](#footnote-1).

An RMOA can conclude that regulatory risk management at EU level is required for a substance (e.g. harmonised classification and labelling, Candidate List inclusion, restriction, other EU legislation) or that no regulatory action is required at EU level. Any subsequent regulatory processes under the REACH Regulation include consultation of interested parties and appropriate decision making involving Member State Competent Authorities and the European Commission as defined in REACH.

This Conclusion document provides the outcome of the RMOA carried out by the author authority. In this conclusion document, the authority considers how the available information collected on the substance can be used to conclude whether regulatory risk management activities are required for a substance and which is the most appropriate instrument to address a concern. With this Conclusion document the Commission, the competent authorities of the other Member States and stakeholders are informed of the considerations of the author authority. In case the author authority proposes in this conclusion document further regulatory risk management measures, this shall not be considered initiating those other measures or processes. Since this document only reflects the views of the author authority, it does not preclude Member States or the European Commission from considering or initiating regulatory risk management measures which they deem appropriate.

### OVERVIEW OF OTHER PROCESSES / EU LEGISLATION

### CONCLUSION OF RMOA

This conclusion is based on the REACH and CLP data as well as other available relevant information taking into account the SVHC Roadmap to 2020, where appropriate.

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| --- | --- |
| **Conclusions** | **Tick box** |
| Need for follow-up regulatory action at EU level: |  |
| *Harmonised classification and labelling* |  |
| *Identification as SVHC (authorisation)* |  |
| *Restriction under REACH* |  |
| *Other EU-wide regulatory measures* | x |
| Need for action other than EU regulatory action |  |
| No action needed at this time |  |

### Need for follow-up regulatory action at EU level

### Other EU-wide regulatory measures (Dossier Evaluation/Compliance Check)

N-[(2-methylpropoxy)methyl]acrylamide (NMPMA) is a structurally similar analogue to acrylamide. We consider that the current data for NMPMA provided by the registrant does not allow to conclude on the mutagenic potential of this substance. The information requirements at this tonnage level are not fulfilled. An experimental *in vivo* mutagenicity test as a follow up to the positive *in vitro* chromosomal aberration test should be requested under compliance check. Furthermore, as the current Chemical Safety Report lacks risk characterisations for certain exposure scenarios, this too should be included in the compliance check.

NMPMA was negative in the AMES test and positive in the *in vitro* chromosomal aberration (CA) test, which is in accordance with the mutagenicity of acrylamide. As a follow-up of the positive *in vitro* CA test the registrant provided an *in vivo* mutagenicity test based on a QSAR approach (Mammalian Erythrocyte Micronucleus Test), which predicted a negative outcome.

Our own QSAR analysis using metabolism simulator indicates that both acrylamide and reactive epoxides may be formed *in vivo*. In addition, read-across using different categories predicts positive results for in vivo micronucleus.

To conclude, we consider that the information requirements have not been fulfilled by the registrant, as a proper experimental *in vivo* chromosomal aberration test as a follow up to the positive *in vitro* CA test is lacking. Therefore, the substance would be qualified for Compliance check and a target for ECHA to request an *in vivo* test.

### TEntative Plan for follow-up Actions if necessary

Indication of a tentative plan is not a formal commitment by the authority. A commitment to prepare a REACH Annex XV dossier (SVHC, restrictions) and/or CLP Annex VI dossier should be made via the Registry of Intentions.

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| **Follow-up action** | **Date for follow-up** | **Actor** |
| Dossier Evaluation/Compliance check |  |  |

1. For more information on the SVHC Roadmap: <http://echa.europa.eu/addressing-chemicals-of-concern/substances-of-potential-concern/svhc-roadmap-to-2020-implementation> [↑](#footnote-ref-1)