

Justification for the selection of a candidate CoRAP substance

Substance Name (Public name): 2, 2', 2''-nitrioltriethanol
EC Number: 203-049-8
CAS Number: 102-71-6
Submitted by: Bureau for Chemical Substances, Poland
Published: 20/03/2013

NOTE

This document has been prepared by Poland CA but the evaluating Member State was changed to United Kingdom in the CoRAP update for 2014-2016.

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1 IDENTITY OF THE SUBSTANCE

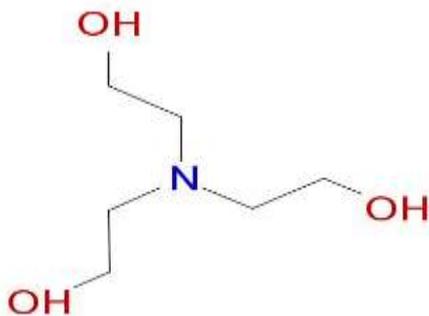
1.1 Name and other identifiers of the substance

Table 1: Substance identity

| | |
|---|---|
| EC number: | 203-049-8 |
| EC name: | 2,2',2''-nitrilotriethanol |
| CAS number (in the EC inventory): | 102-71-6 |
| CAS number: | 102-71-6 |
| CAS name: | Ethanol, 2,2',2''-nitrilotris- |
| IUPAC name: | 2,2',2''-nitrilotriethanol |
| Index number in Annex VI of the CLP Regulation | - |
| Molecular formula: | C ₆ H ₁₅ NO ₃ |
| Molecular weight or molecular weight range: | 149,2 g/mol |
| Synonyms: | TEA TEOA Triethanolamine Triethanolamin Tris(2-hydroxyethyl)amine |

Type of substance Mono-constituent Multi-constituent UVCB

Structural formula:



2 CLASSIFICATION AND LABELLING

2.1 Harmonised Classification in Annex VI of the CLP

This substance was not classified in the Annex I of Directive 67/548/EEC and not listed on Annex VI Regulation (EC) NO 1272/2008- List of harmonised classification and labelling of hazardous substances.

2.2 Proposal for Harmonised Classification in Annex VI of the CLP

None proposed.

2.3 Self-classification

The substance is not classified by the registrants.

The following classifications are notified to the Classification and labelling inventory:

Met. Corr. 1; H290: May be corrosive to metals.

Acute Tox. 4; H302: Harmful if swallowed.

Acute Tox. 4; H312: Harmful in contact with skin.

Skin Corr. 1B; H314: Causes severe skin burns and eye damage.

Skin Irrit. 2; H315: Causes skin irritation.

Skin Sens. 1; H317: May cause an allergic skin reaction.

Eye Dam. 1; H318: Causes serious eye damage.

Eye Irrit. 2; H319: Causes serious eye irritation.

Acute Tox. 4 H332: Harmful if inhaled.

STOT SE 3; H335: May cause respiratory irritation.

STOT RE 2; H373: May cause damage to organs.

Aquatic Chronic 2; H411: toxic to aquatic life with long lasting effects.

Aquatic Chronic 4; H413: May cause long lasting effects to aquatic life.

3 JUSTIFICATION FOR THE SELECTION OF THE CANDIDATE CoRAP SUBSTANCE

3.1 Legal basis for the proposal

Article 44(1) (refined prioritisation criteria for substance evaluation)

Article 45(5) (Member State priority)

3.2 Grounds for concern

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> (Suspected) CMR | <input checked="" type="checkbox"/> Wide dispersive use | <input type="checkbox"/> Cumulative exposure |
| <input checked="" type="checkbox"/> (Suspected) Sensitiser | <input checked="" type="checkbox"/> Consumer use | <input type="checkbox"/> High RCR |
| <input type="checkbox"/> (Suspected) PBT | <input type="checkbox"/> Exposure of sensitive populations | <input checked="" type="checkbox"/> Aggregated tonnage |
| <input type="checkbox"/> Suspected endocrine disruptor | <input type="checkbox"/> Other (provide further details below) | |

2,2',2''-Nitrilotriethanol was selected to CoRAP because of its large production volume, widespread use in manufacturing with high exposure for workers, wide dispersive use with high release for environment and ubiquitous presence in consumer goods.

The animal toxicity studies indicated a potential for the substance to cause contact allergy. Reports indicated that 2,2',2''-nitrilotriethanol causes an increased incidence of tumor growth in the liver in female mice.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1592523/?tool=pmcentrez>).

The substance is identified in the list of agent causing occupational asthma from the CSST (Commission de la santé et de la sécurité du travail) (updated April 2010).

A 2009 study found that TEA has potential acute, sub-chronic and chronic toxicity properties in respect to aquatic species.
 (http://www.sciencedirect.com/science/article/pii/S0304389409018469)

3.3 Information on aggregated tonnage and uses

| | | |
|---|---|---|
| <input type="checkbox"/> 1 – 10 tpa | <input type="checkbox"/> 10 – 100 tpa | <input type="checkbox"/> 100 – 1000 tpa |
| <input type="checkbox"/> 1000 – 10,000 tpa | <input type="checkbox"/> 10,000 – 100,000 tpa | <input checked="" type="checkbox"/> 100,000 – 1,000,000 tpa |
| <input type="checkbox"/> 1,000,000 – 10,000,000 tpa | <input type="checkbox"/> > 10,000,000 tpa | |
| <input type="checkbox"/> <1 >+ tpa | <input type="checkbox"/> Confidential | |

Please provide further details if appropriate

| | | | |
|--|--|--|--|
| <input checked="" type="checkbox"/> Industrial use | <input checked="" type="checkbox"/> Professional use | <input checked="" type="checkbox"/> Consumer use | <input type="checkbox"/> Closed System |
|--|--|--|--|

The substance has a large production volume, widespread use in manufacturing with high exposure for workers, wide dispersive use with high release for environment and ubiquitous presence in consumer goods.

3.4 Other completed/ongoing regulatory processes that may affect suitability for substance evaluation

| | |
|--|---|
| <input type="checkbox"/> Compliance check | <input type="checkbox"/> Dangerous substances Directive 67/548/EEC |
| <input type="checkbox"/> Testing proposal | <input type="checkbox"/> Existing Substances Regulation 793/93/EEC |
| <input type="checkbox"/> Annex VI (CLP) | <input type="checkbox"/> Plant Protection Products Regulation 91/414/EEC |
| <input type="checkbox"/> Annex XV (SVHC) | <input type="checkbox"/> Biocidal Products Directive 98/8/EEC |
| <input type="checkbox"/> Annex XIV (Authorisation) | <input checked="" type="checkbox"/> Other (provide further details below) |
| <input type="checkbox"/> Annex XVII (Restriction) | |
| The substance is identified in the list of agent causing occupational asthma from the CSST (Commission de la santé et de la sécurité du travail) (updated April 2010). | |

3.5 Information to be requested to clarify the suspected risk

| | |
|---|---|
| <input type="checkbox"/> Information on toxicological properties | <input type="checkbox"/> Information on physico-chemical properties |
| <input type="checkbox"/> Information on fate and behaviour | <input type="checkbox"/> Information on exposure |
| <input type="checkbox"/> Information on ecotoxicological properties | <input type="checkbox"/> Information on uses |
| <input type="checkbox"/> Other (provide further details below) | |
| Further information might be needed depending on the outcome of the substance evaluation. | |

3.6 Potential follow-up and link to risk management

| | | | |
|---|---|--|--|
| <input type="checkbox"/> Restriction | <input type="checkbox"/> Harmonised C&L | <input type="checkbox"/> Authorisation | <input type="checkbox"/> Other (provide further details) |
| Depending on outcome of the substance evaluation a CLH proposal for the substance and further RMM action is possible. | | | |