Justification for the selection of a substance for CoRAP inclusion

Substance Name (Public Name): 2,2'-oxydiethanol

Chemical Group: primary alcohol with ether group

EC Number: 203-872-2

CAS Number: 111-46-6

Submitted by:

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Hungary

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Note

This document has been prepared by the evaluating Member State given in the CoRAP update.

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1 IDENTITY OF THE SUBSTANCE

1.1 Other identifiers of the substance

EC name:	2,2'-oxydiethanol	
IUPAC name:	2,2'-oxydiethanol	
Index number in Annex VI of the CLP Regulation	603-140-00-6	
Molecular formula:	$C_4H_{10}O_3$	
Molecular weight or molecular weight range:	106.1204 g/mol	
	2,2'-oxybisethanol	
Synonyms:	Ethanol, 2,2'-oxybis-	
	Diethylene glycol	

	Type of substance			☐ UVCB
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Structural formula:

1.2 Similar substances/grouping possibilities

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2 CLASSIFICATION AND LABELLING

2.1 Harmonised Classification in Annex VI of the CLP

Classification		Labelling			Specific	Notes
Hazard Class and Category Code(s)	Hazard Statement Code(s)	Hazard Statement Code(s)	Supplementary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	Concentration limits, M- Factors	
Acute	H302	H302		GHS07		
Tox. 4 *	11302	11302		Wng		

Hazard statement:

H302: Harmful if swallowed.

2.2 Self classification

• In the registration data:

In addition to the harmonised endpoint, has registrants given the following self classification:

STOT RE 2, H373: May cause damage to organs through prolonged or repeated exposure.

Affected organs: kidney Route of exposure: Oral

• The following hazard classes are in addition notified among the aggregated self classifications in the C&L Inventory:

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

Skin Irrit. 2, H315: Causes skin irritation.

STOT SE 3, H336: May cause drowsiness or dizziness.

2.3 Proposal for Harmonised Classification in Annex VI of the CLP

Not applicable

3 INFORMATION ON AGGREGATED TONNAGE AND USES

From ECHA dissemination site						
☐ 1 - 10 tpa		☐ 10 - 100 tpa		☐ 100 - 1000 tpa		
☐ 1000 - 10,000 tpa		☐ 10,000 - 100,000 tpa		☐ 100,000 - 1,000,000 tpa		
☐ 1,000,000 - 10,000,00	0 tpa	□ 10,000,000 -	100,000,000 tpa	□ > 10	0,000,000 tpa	
At least one registrant h	nas clain	ned the tonnage	confidential.			
☐ Industrial use	⊠ Profe	essional use	□ Consumer use)	☐ Closed System	
Industrial use: Production of Polymers, filled polymers, foams, coatings, adhesives, sealants Use in water-treatment chemicals Solvent Use as Process chemical Use in Paints/ Coatings Use in Cleaning agents Use in lubricants Use in metal-working fluids Use in/as functional fluids Use in laboratories Use as intermediate in chemical synthesis Professional use: Use in Paints/Coatings/Adhesives/Sealants/Foams/Polymers/filled Polymers Use in Cleaning agents Use in metal-working fluids Use in/as functional fluids Use in/as functional fluids Use in/as de-icing/anti-icing applications/agents						
Use in water-treatment chemicals						
Use as a fuel Solvent						
Consumer use: Use in Paints/Coatings/Surface treatment products Use in Cleaning agents Use in heat transfer and hydraulic fluids Use in/as de-icing/anti-icing applications/agents Use in adhesives and sealants Production of rigid foam Use in Biocidal products Use as a fuel Solvent Use in agrochemicals						

4 JUSTIFICATION FOR THE SELECTION OF THE CANDIDATE CORAP SUBSTANCE

4.1 Legal basis for the proposal ☑ Article 44(2) (refined prioritisation criteria for substance evaluation) ☐ Article 45(5) (Member State priority) 4.2 Selection criteria met (why the substance qualifies for being in CoRAP) ☑ Fulfils criteria as CMR/ Suspected CMR ☐ Fulfils criteria as Sensitiser/ Suspected sensitiser ☐ Fulfils criteria as potential endocrine disrupter ☐ Fulfils criteria as PBT/vPvB / Suspected PBT/vPvB ☑ Fulfils criteria high (aggregated) tonnage (tpa > 1000)

4.3 Initial grounds for concern to be clarified under Substance Evaluation

Hazard based concerns					
CMR □C □M □R	Suspected CMR ¹ ⊠C ⊠M □R	☐ Potential endocrine disruptor			
Sensitiser	☐ Sensitiser ☐ Suspected Sensitiser ¹				
☐ PBT/vPvB	☐ Suspected PBT/vPvB ¹	☐ Other (please specify below)			
Exposure/risk based concer	ns				
☐ Exposure of environment ☐ Exposure of workers ☐ Cumulative exposure					
☐ High RCR ☐ High (aggregated) tonnage ☐ Other (please specify below)					
Carcinogenic potential of 2,2'-oxydiethanol has been investigated mostly in rodents. The data suggest a potential of the substance to induce bladder malignancies at higher doses after oral administration which are probably associated with the bladder stone formation. Human data are inconclusive due to either the relatively low number of cohorts studied or other methodological reasons. However, human carcinogenicity of the substance was not excluded. Recent data also suggest possible clastogenicity of the substance in vivo.					
The self-classification in the C&L inventory suggests that the substance also has specific target organ toxic property arising from a repeated exposure. According to the available repeated dose studies the kidney is the target organ of toxicity					

Suspected PBT: Potentially Persistent, Bioaccumulative and Toxic

☐ Fulfils exposure criteria

☐ Fulfils MS's (national) priorities

CMR/Sensitiser: known carcinogenic and/or mutagenic and/or reprotoxic properties/known sensitising properties (according to CLP harmonized or registrant self-classification or CLP Inventory) Suspected CMR/Suspected sensitiser: suspected carcinogenic and/or mutagenic and/or reprotoxic properties/suspected sensitising properties (not classified according to CLP harmonized or registrant self-classification)

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

☐ Compliance check, Final decision	☐ Dangerous substances Directive 67/548/EEC		
☐ Testing proposal	☐ Existing Substances Regulation 793/93/EEC		
☐ Annex VI (CLP)	☐ Plant Protection Products Regulation 91/414/EEC		
☐ Annex XV (SVHC)	☐ Biocidal Products Directive 98/8/EEC ; Biocidal Product Regulation (Regulation (EU) 528/2012)		
☐ Annex XIV (Authorisation)	☐ Other (provide further details below)		
☐ Annex XVII (Restriction)			

4.5 Preliminary indication of information that may need to be requested to clarify the concern

$oxed{\boxtimes}$ Information on toxicological properties	☐ Information on physico-chemical properties		
$oxed{\boxtimes}$ Information on fate and behaviour	☐ Information on exposure		
☐ Information on ecotoxicological properties	☐ Information on uses		
☐ Information ED potential	☐ Other (provide further details below)		
Based upon the concerns identified further information to clarify carcinogenic, mutagenic and toxicological properties of the substance may be neccesery. In particular, it might be useful to learn the mode of action and kinetics of the substance in order to clarify its effects on humans and particularly on kidney.			

4.6 Potential follow-up and link to risk management

⊠Restriction	Authorisation	☐ Other (provide further details)
elling and also propo		amendment of the harmonized the substance are possible risk