# SAFETY DATA SHEET

Date of issue/Date of revision : 1.01 : 3 September 2024 Version



# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

**Product name** : NOVAGUARD 840 LT HARDENER CREAM

**Product code** : 00246628 : Liquid. **Product type** Other means of : Not available.

identification

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Professional applications, Used by spraying.

Use of the substance/

mixture

: Coating.; Hardener.

**Uses advised against** : Product is not intended, labelled or packaged for consumer use.

## 1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium

Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

**Supplier** 

+31 20 4075210

## **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

: Mixture **Product definition** Classification according to UK CLP/GHS

Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eve Dam. 1. H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

**Hazard pictograms** 







Signal word : Danger

**NOVAGUARD 840 LT HARDENER CREAM** 

# **SECTION 2: Hazards identification**

**Hazard statements** : Harmful if swallowed.

> Toxic in contact with skin or if inhaled. Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention** : Wear protective gloves, protective clothing and eye or face protection. Avoid

release to the environment.

Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF Response

SWALLOWED: Immediately call a POISON CENTER or doctor.

**Storage** : Not applicable.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

P280, P273, P391, P304 + P310, P301 + P310, P501

Supplemental label

elements

: Not applicable.

**Annex XVII - Restrictions** on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

Special packaging requirements

**Containers to be fitted** 

with child-resistant fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

**Product meets the criteria** for PBT or vPvB according to Regulation (EC) No.

1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification : None known.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine)	REACH #: 01-2119497829-12 EC: 229-962-1 CAS: 6864-37-5 Index: 612-110-00-1	≥50 - ≤75	Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Chronic 2, H411	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥5.0 - ≤10	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
Formaldehyde, polymer with N,N-dimethyl-1,3-propanediamine and phenol	CAS: 445498-00-0	≥5.0 - ≤10	Acute Tox. 4, H302 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
N-(3-(trimethoxysilyl)propyl)	EC: 217-164-6	≥1.0 - ≤5.0	Eye Dam. 1, H318	[1]

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# **SECTION 3: Composition/information on ingredients**

ethylenediamine	CAS: 1760-24-3		Skin Sens. 1B, H317 STOT SE 3, H335	
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≥1.0 - ≤5.0	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1C, H314 Eye Dam. 1, H318	[1]
3-aminopropyldimethylamine	REACH #: 01-2119486842-27 EC: 203-680-9 CAS: 109-55-7 Index: 612-061-00-6	≤0.30	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	[1]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

Type

**Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathin

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

**Skin contact**: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep

person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

### 4.2 Most important symptoms and effects, both acute and delayed

## Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation**: Toxic if inhaled.

**Skin contact**: Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.

**Ingestion**: Harmful if swallowed.

## Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

watering redness

Inhalation : No specific data.

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## **SECTION 4: First aid measures**

: Adverse symptoms may include the following: Skin contact

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing** 

media

: None known.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the** substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion** products

: Decomposition products may include the following materials: carbon oxides

nitrogen oxides metal oxide/oxides Formaldehyde.

## 5.3 Advice for firefighters

**Special protective actions** for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective** equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### 6.3 Methods and material for containment and cleaning up

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## **SECTION 6: Accidental release measures**

## Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

### Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# 6.4 Reference to other sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 7.1 Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

See Section 1.2 for Identified uses.

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# **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## **Occupational exposure limits**

No exposure limit value known.

procedures

**Recommended monitoring**: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
2,2'-dimethyl-4,4'-	DNEL	Long term Oral	0.008 mg/kg bw/day	General population	Systemic
methylenebis					
(cyclohexylamine)					
	DNEL	Long term Dermal	0.05 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.6 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m³	Workers	Systemic
N-(3-(trimethoxysilyl)propyl)	DNEL	Long term Inhalation	0.1 mg/m³	General population	Local
ethylenediamine					
	DNEL	Long term Inhalation	0.6 mg/m³	Workers	Local
	DNEL	Long term Oral	4 mg/kg bw/day	General population	
	DNEL	Short term Inhalation	4 mg/m³	General population	
	DNEL	Short term Inhalation	5.36 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	26 mg/m³	General population	
	DNEL	Long term Inhalation	130 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	26400 mg/m <sup>3</sup>	General population	Systemic
2,4,6-tris	DNEL	Long term Oral	0.075 mg/kg bw/day	General population	Systemic
(dimethylaminomethyl)phenol					
	DNEL	Short term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.075 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.13 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	0.13 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	0.15 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.53 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2.1 mg/m <sup>3</sup>	Workers	Systemic
3-aminopropyldimethylamine	DNEL	Long term Inhalation	1.2 mg/m³	Workers	Systemic

## **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
3-aminopropyldimethylamine	Fresh water	0.034 mg/l	Assessment Factors
	Marine water	0.003 mg/l	Assessment Factors
	Sewage Treatment Plant	69.5 mg/l	Assessment Factors
	Fresh water sediment	0.221 mg/kg dwt	Equilibrium Partitioning
		0.022 mg/kg dwt	Equilibrium Partitioning
	Soil	0.024 mg/kg dwt	Equilibrium Partitioning

## 8.2 Exposure controls

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# **SECTION 8: Exposure controls/personal protection**

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection
Skin protection
Hand protection

: Chemical splash goggles and face shield.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

nitrile neoprene

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

**Environmental exposure** controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### **Appearance**

Physical state : Liquid.
Colour : Yellow.
Odour : Amine-like.
Odour threshold : Not available.

Melting point/freezing point : May start to solidify at the following temperature: -7.1°C (19.2°F) This is based on data for the following ingredient: 2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine).

Weighted average: -8.54°C (16.6°F)

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## **SECTION 9: Physical and chemical properties**

Initial boiling point and

boiling range

: >37.78°C (>100°F)

Flammability (solid, gas)

Upper/lower flammability or

: liquid

: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)

explosive limits

Closed cup: 107°C (224.6°F)

**Auto-ignition temperature** 

: 275°C (527°F)

рH

Not applicable.

Flash point

Not applicable. insoluble in water.

**Viscosity** 

Media

: Kinematic (40°C): >21 mm<sup>2</sup>/s

Solubility(ies)

cold water

Not soluble

Miscible with water

: No.

Partition coefficient: n-octanol/ : Not applicable.

Result

water

Vapour pressure

	Vapour Pressure at 20°C		Vap	our pressui	re at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
2,4,6-tris(dimethylaminomethyl) phenol	0.056	0.0075	EU A.4			

Relative density : 0.97

Vapour density : Highest known value: 3.7 (Air = 1) (benzyl alcohol).

**Explosive properties** The product itself is not explosive, but the formation of an explosible mixture of

: Product does not present an oxidizing hazard.

vapour or dust with air is possible.

**Oxidising properties** 

**Particle characteristics** 

Median particle size : Not applicable.

# **SECTION 10: Stability and reactivity**

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides Formaldehyde. metal oxide/oxides

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## SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

## **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
2,2'-dimethyl-4,4'- methylenebis (cyclohexylamine)	LC50 Inhalation Dusts and mists	Rat	420 mg/m³	4 hours
	LD50 Dermal	Rabbit	>0.2 g/kg	-
	LD50 Oral	Rat	>0.32 g/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m³	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
N-(3-(trimethoxysilyl)propyl) ethylenediamine	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	2413 mg/kg	-
2,4,6-tris (dimethylaminomethyl) phenol	LD50 Dermal	Rat	1280 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
3-aminopropyldimethylamine	LD50 Dermal LD50 Oral	Rabbit Rat	>1000 mg/kg 410 mg/kg	-

# **Conclusion/Summary**

: There are no data available on the mixture itself.

## **Acute toxicity estimates**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
₩OVAGUARD 840 LT HARDENER CREAM	575.4	407.6	N/A	N/A	0.66
2,2'-dimethyl-4,4'-methylenebis(cyclohexylamine)	500	300	N/A	N/A	0.5
benzyl alcohol	1230	N/A	N/A	N/A	1.5
Formaldehyde, polymer with N,N-dimethyl-	500	N/A	N/A	N/A	N/A
1,3-propanediamine and phenol					
N-(3-(trimethoxysilyl)propyl)ethylenediamine	2413	N/A	N/A	N/A	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1200	1280	N/A	N/A	N/A
3-aminopropyldimethylamine	410	1100	N/A	N/A	N/A

## **Irritation/Corrosion**

**Conclusion/Summary** : Not available.

Skin : There are no data available on the mixture itself. **Eyes** : There are no data available on the mixture itself. Respiratory : There are no data available on the mixture itself.

**Sensitisation** 

Conclusion/Summary

: There are no data available on the mixture itself. Skin : There are no data available on the mixture itself. Respiratory

**Mutagenicity** 

**Conclusion/Summary** 

: There are no data available on the mixture itself.

**Carcinogenicity** 

**Conclusion/Summary** : There are no data available on the mixture itself.

**Reproductive toxicity** 

**Conclusion/Summary** : There are no data available on the mixture itself.

**Teratogenicity** 

**Conclusion/Summary** : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

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# **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Category 3		Respiratory tract irritation

## Specific target organ toxicity (repeated exposure)

Not available.

### **Aspiration hazard**

Not available.

**Information on likely routes**: Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Toxic if inhaled.

: Causes severe burns. Toxic in contact with skin. May cause an allergic skin Skin contact

reaction.

Ingestion : Harmful if swallowed.

## Symptoms related to the physical, chemical and toxicological characteristics

: Adverse symptoms may include the following: Eye contact

> pain watering redness

Inhalation : No specific data.

**Skin contact** : Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

**Potential immediate** 

effects

: Not available.

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

**Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

: Once sensitized, a severe allergic reaction may occur when subsequently exposed General

to very low levels.

Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

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# **SECTION 12: Ecological information**

## 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
M-(3-(trimethoxysilyl)propyl) ethylenediamine	EC50 597 mg/l	Fish	96 hours
2,4,6-tris (dimethylaminomethyl) phenol	Acute LC50 >100 mg/l	Daphnia	48 hours
3-aminopropyldimethylamine	Acute LC50 >100 mg/l Acute LC50 122 mg/l	Fish Fish	96 hours 96 hours

**Conclusion/Summary**: Not available.

## 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>2</b> ,4,6-tris	OECD 301D	4 % - Not readily - 28 days	-	-
(dimethylaminomethyl)	Ready			
phenol	Biodegradability -			
	Closed Bottle			
	Test			
3-aminopropyldimethylamine	OECD 301D	69 % - Readily - 20 days	-	-

**Conclusion/Summary**: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
penzyl alcohol 2,4,6-tris (dimethylaminomethyl) phenol	-	-	Readily Not readily
3-aminopropyldimethylamine	-	-	Readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2,2'-dimethyl-4,4'- methylenebis	1.8	-	Low
(cyclohexylamine) benzyl alcohol 2,4,6-tris	0.87 0.219	-	Low Low
(dimethylaminomethyl) phenol			
3-aminopropyldimethylamine	-0.352	-	Low

## 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

## 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects**: No known significant effects or critical hazards.

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# **SECTION 13: Disposal considerations**

Yes.

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## 13.1 Waste treatment methods

### **Product**

**Methods of disposal** 

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

## **Hazardous waste**

## Waste catalogue

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

## **Packaging**

**Methods of disposal** 

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging		Waste catalogue
Container	15 01 06	mixed packaging

### **Special precautions**

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

# **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN2922	UN2922	UN2922	UN2922
14.2 UN proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S. (2,2'- dimethyl-4,4'- methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol)			
	(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol)	(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol)	(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol)	(2,2'-dimethyl-4,4'-methylenebis (cyclohexylamine), 2,4,6-tris (dimethylaminomethyl) phenol)
14.3 Transport hazard class(es)	8 (6.1)	8 (6.1)	8 (6.1)	8 (6.1)
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

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# **SECTION 14: Transport information**

Marine pollutant	Not applicable.	Not applicable.	(2,2'-dimethyl-4,4'-	Not applicable.
substances			methylenebis	
			(cyclohexylamine))	

## **Additional information**

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

**ADN** : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or

≤5 kg.

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation

regulations.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to IMO

: Not available.

instruments

# **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **UK (GB)/REACH**

**Annex XIV - List of substances subject to authorisation** 

**Annex XIV** 

None of the components are listed.

**Substances of very high concern** 

None of the components are listed.

Ozone depleting substances

Not listed.

**Annex XVII - Restrictions** : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

### **Seveso Directive**

This product is controlled under the Seveso Directive.

### **Danger criteria**

Category

H2

E2

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and** acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

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## **SECTION 16: Other information**

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification

Classification	Justification
Acute Tox. 4, H302	Calculation method
Acute Tox. 3, H311	Calculation method
Acute Tox. 3, H331	Calculation method
Skin Corr. 1A, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

## Full text of abbreviated H statements

<b>⊮</b> 226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

## **Full text of classifications**

I dil text of classific	ations	
Cute Tox. 3	ACUTE TOXICITY - Category 3	
Acute Tox. 4	ACUTE TOXICITY - Category 4	
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1	
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1	
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3	
Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A	
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B	
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C	
Skin Sens. 1	SKIN SENSITISATION - Category 1	
Skin Sens. 1B	SKIN SENSITISATION - Category 1B	
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3	

### **History**

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### **Disclaimer**

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