



SAFETY DATA SHEET VERSENEX 80E

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

1.1. Product identifier

Product name	VERSENEX 80E
Product number	11434
Synonyms; trade names	VERSENEX 80
REACH registration number	01-2119474445-33-XXXX
CAS number	140-01-2
EC number	205-391-3

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

Identified uses	Chelating Agent Scale Inhibition Personal Care Cleaning agent. Industrial application Biocide Adhesive. Sealant. Textiles
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	11434

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Met. Corr. 1 - H290
Health hazards	Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT RE 2 - H373
Environmental hazards	Not Classified

2.2. Label elements

EC number	205-391-3
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Pictogram



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Signal word	Warning
Hazard statements	H290 May be corrosive to metals. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	P202 Do not handle until all safety precautions have been read and understood. P234 Keep only in original packaging. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	PENTASODIUM DIETHYLENETRIAMINEPENTAACETATE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

PENTASODIUM DIETHYLENETRIAMINEPENTAACETATE			30-60%
CAS number: 140-01-2	EC number: 205-391-3	REACH registration number: 01-2119474445-33-XXXX	
Classification Acute Tox. 4 - H332 Repr. 2 - H361d STOT RE 2 - H373			
SODIUM HYDROXIDE			1-5%
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX	
Classification Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318			
TRISODIUM NITRILOTRIACETATE			<1%
CAS number: 5064-31-3	EC number: 225-768-6	REACH registration number: 01-2119519239-36-XXXX	
Classification Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Carc. 2 - H351			

The full text for all hazard statements is displayed in Section 16.

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Product name	VERSENEX 80E
REACH registration number	01-2119474445-33-XXXX
CAS number	140-01-2
EC number	205-391-3
Composition comments	The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Give plenty of water to drink. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

Inhalation	Harmful if inhaled. May cause respiratory system irritation.
Ingestion	The product irritates mucous membranes and may cause abdominal discomfort if swallowed.
Skin contact	Skin irritation.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.
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6.2. Environmental precautions

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Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

Advice on general occupational hygiene Pregnant or breastfeeding women should not work with this product if there is any risk of exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

DNEL

Workers - Inhalation; Short term local effects: 2.5 mg/m³
 Workers - Dermal; Long term systemic effects: 11,718 mg/kg/day
 Workers - Inhalation; Long term systemic effects: 5.7 mg/m³
 Consumer - Dermal; Long term systemic effects: 11,718 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 2.1 mg/m³
 Consumer - Oral; Long term systemic effects: 2.3 mg/kg/day

PNEC

- Fresh water; 6.4 mg/l
 - Marine water; 0.64 mg/l
 - STP; 51 mg/l
 - Soil; 0.853 mg/kg
 - Intermittent release; 3.1 mg/l
 - Sediment (Freshwater); 23 mg/kg/day
 - Sediment (Marinewater); 2.3 mg/kg/day

PENTASODIUM DIETHYLENETRIAMINEPENTAACETATE (CAS: 140-01-2)

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DNEL	Workers - Inhalation; Long term systemic effects: 2.5 mg/m³ Workers - Dermal; Long term systemic effects: 11718 mg/kg/day Consumer - Inhalation; Short term local effects: 2.5 mg/kg/day Consumer - Dermal; Long term systemic effects: 5859 mg/kg/day Consumer - Inhalation; Long term systemic effects: 1 mg/m³ Consumer - Oral; Long term : 1.2 mg/kg/day
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PNEC	- Fresh water; 6.4 mg/l - Marine water; 0.64 mg/l - Intermittent release; 3.1 mg/l - STP; 51 mg/l - Sediment (Freshwater); 23 mg/kg - Sediment (Marinewater); 2.3 mg/kg - Soil; 0.853 mg/kg
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SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Consumer - Inhalation; Long term local effects: 1 mg/m³ Workers - Dermal; Short term local effects: 2 mg/kg/day Workers - Inhalation; Short term local effects: 2 mg/m³ Workers - Inhalation; Long term local effects: 1 mg/m³
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TRISODIUM NITRILOTRIACETATE (CAS: 5064-31-3)

Ingredient comments	No exposure limits known for ingredient(s).
DNEL	Workers - Inhalation; Short term systemic effects: 5.25 mg/m³ Workers - Inhalation; Long term systemic effects: 3.5 mg/m³ Consumer - Inhalation; Long term systemic effects: 1.75 mg/m³ Consumer - Inhalation; Long term systemic effects: 0.5 mg/kg/day
PNEC	- Fresh water; 0.93 mg/l - Marine water; 0.093 mg/l - Intermittent release; 0.915 mg/l - STP; 540 mg/l - Sediment (Freshwater); 3.64 mg/kg - Sediment (Marinewater); 0.364 mg/kg - Soil; 0.182 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours.

Eye/face protection

The following protection should be worn: Chemical splash goggles. EN 166

Hand protection

Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Polyvinyl chloride (PVC). glove thickness 0.7mm Butyl rubber. glove thickness >0.35mm Neoprene. glove thickness >0.35mm Nitrile rubber. glove thickness 0.4mm EN 374

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Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Particulate filter, type P2. EN 136/140/141/145/143/149

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless to pale yellow.
Odour	Mild.
Odour threshold	No information available.
pH	pH (diluted solution): 11.0 - 11.8 @ %1 solution
Melting point	-28°C
Initial boiling point and range	106°C @ 760 mm Hg
Flash point	No information available.
Evaporation rate	<0.8
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.30 @ 25°C
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	log Pow: <-2
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	33 cSt @ 20°C
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	No information available.
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Refractive index	No information available.
Particle size	No information available.
Molecular weight	503.1
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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10.5. Incompatible materials

Materials to avoid	Avoid contact with the following materials: Copper. Aluminium. Nickel.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD ₅₀)	LD ₅₀ >2000 mg/kg, Oral, Rat
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Acute toxicity - dermal

Notes (dermal LD ₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rabbit
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Acute toxicity - inhalation

Notes (inhalation LC ₅₀)	LD ₅₀ 1-5 mg/l, Inhalation, Rat
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ATE inhalation (dusts/mists mg/l)	1.5
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Skin corrosion/irritation

Animal data	Irritating.
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Serious eye damage/irritation

Serious eye damage/irritation	Irritating.
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Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.
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Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - development Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Inhalation Harmful by inhalation. May cause respiratory system irritation.

Ingestion The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Skin contact Irritating to skin.

Eye contact Causes serious eye irritation.

Toxicological information on ingredients.

PENTASODIUM DIETHYLENETRIAMINEPENTAACETATE

Acute toxicity - inhalation

ATE inhalation 3.75
(dusts/mists mg/l)

SODIUM HYDROXIDE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >500 mg/kg, Oral, Rabbit

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

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Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust is severely irritating to the upper respiratory system. Symptoms following overexposure may include the following: Coughing. Wheezing/breathing difficulties. May cause an asthma-like shortness of breath. Sore throat. Burning sensation in mouth. Upper respiratory irritation. Tracheobronchitis, pulmonary oedema.

Ingestion Causes severe burns. May cause burns in mucous membranes, throat, oesophagus and stomach. Symptoms following overexposure may include the following: Chemical burns. Burning sensation in mouth. Nausea, vomiting. Vomiting of blood. Swallowing concentrated chemical may cause severe internal injury.

Skin contact Causes severe burns. Blistering may occur. May cause serious chemical burns to the skin. Prolonged contact causes serious tissue damage.

Eye contact Causes serious eye damage. May cause chemical eye burns. Symptoms following overexposure may include the following: Severe irritation, burning and tearing. Corneal damage. May cause permanent damage if eye is not immediately irrigated.

TRISODIUM NITRILOTRIACETATE

Other health effects Carcinogen Category 3.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,450.0

Species Rat

ATE oral (mg/kg) 1,450.0

Inhalation Dust may irritate the respiratory system. May cause coughing and difficulties in breathing.

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Ingestion	Gastrointestinal symptoms, including upset stomach. Harmful if swallowed.
Skin contact	Slightly irritating.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.

SODIUM HYDROXIDE

Ecotoxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

TRISODIUM NITRILOTRIACETATE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 854 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 310 mg/l, Daphnia magna

Ecological information on ingredients.

PENTASODIUM DIETHYLENETRIAMINEPENTAACETATE

Acute aquatic toxicity

Acute toxicity - fish NOEC, 96 hours: 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 245 mg/l, Daphnia magna

Acute toxicity - aquatic plants NOEC, 23 days: 400 mg/l, Freshwater algae

Acute toxicity - microorganisms EC₅₀, 30 minutes: > 500 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 28 days: 100 mg/l,

Chronic toxicity - aquatic invertebrates NOEC, 18 days: 67 mg/l, Daphnia magna

SODIUM HYDROXIDE

Toxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

VERSENEX 80E**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 33-189 mg/l mg/l, Fish
 LC₅₀, 96 hour: 45.5 mg/l, Oncorhynchus mykiss (Rainbow trout)
 LC₅₀, 96 hour: 125 mg/l, Freshwater fish
 Gambusia affinis (Mosquito fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 40-240 mg/l mg/l, Daphnia magna

TRISODIUM NITRILOTRIACETATE**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 98 - 312 mg/l, Fish
Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 780 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable.

Ecological information on ingredients.**SODIUM HYDROXIDE**

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

TRISODIUM NITRILOTRIACETATE

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient log Pow: <-2

Ecological information on ingredients.**SODIUM HYDROXIDE**

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient No information available.

TRISODIUM NITRILOTRIACETATE

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.**SODIUM HYDROXIDE**

Mobility The product is water-soluble and may spread in water systems.

TRISODIUM NITRILOTRIACETATE

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Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

SODIUM HYDROXIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

TRISODIUM NITRILOTRIACETATE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not available.

Ecological information on ingredients.

SODIUM HYDROXIDE

Other adverse effects Not available.

TRISODIUM NITRILOTRIACETATE

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 3267

UN No. (IMDG) 3267

UN No. (ICAO) 3267

UN No. (ADN) 3267

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS SODIUM HYDROXIDE)

Proper shipping name (IMDG) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS SODIUM HYDROXIDE)

Proper shipping name (ICAO) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS SODIUM HYDROXIDE)

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Proper shipping name (ADN) CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (CONTAINS SODIUM HYDROXIDE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
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15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information. ECHA Disseminated REACH Dossier

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

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Revision date	22/02/2017
Version number	3.001
Supersedes date	24/01/2017
SDS number	11434
SDS status	Approved.
Hazard statements in full	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.
Signature	Jitendra Panchal