SAFETY DATA SHEET

Cleanol-HD

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

1.1 Product identifier

Product name : Cleanol-HD

Product code : B000053

Product description : Cleaner.

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

Identified uses
Professional use; Washing, cleaning, maintenance products.

Uses advised against

This product should not be used for applications other than those described in Section 1.

1.3 Details of the supplier of the safety data sheet

Hilco Chemie B.V.
Industrieweg 7
NL-6673 DE Andelst
T: +31 488-473333
I: www.hako.nl

e-mail address of person responsible for this SDS : sales@hilcochemie.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : +44 844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Met. Corr. 1, H290
Skin Corr. 1, H314
Eye Dam. 1, H318

The product is classified as hazardous according to Regulation (EC) 1272/2008 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

Hazard statements : H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.

Precautionary statements

SECTION 2: Hazards identification

Prevention : P280 - Wear protective gloves, protective clothing and eye or face protection.

Response : P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.

Supplemental label elements : 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	Specific Conc. Limits, M-factors and ATEs	Type
potassium hydroxide	REACH #: 01-2119487136-33 EC: 215-181-3 CAS: 1310-58-3 Index: 019-002-00-8	≤10	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1A, H314 Eye Dam. 1, H318	ATE [Oral] = 333 mg/kg Skin Corr. 1A, H314: C ≥ 5% Skin Corr. 1B, H314: 2% ≤ C < 5% Skin Irrit. 2, H315: 0.5% ≤ C < 2% Eye Dam. 1, H318: C ≥ 2% Eye Irrit. 2, H319: 0.5% ≤ C < 2%	[1]
sodium p-cumenesulphonate	REACH #: 01-2119489411-37 EC: 239-854-6 CAS: 15763-76-5	≤10	Eye Irrit. 2, H319	-	[1]
2-butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0	≤9.3	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	ATE [Oral] = 1200 mg/kg ATE [Inhalation (vapours)] = 3 mg/l	[1] [2]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≤3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	-	[1]

SECTION 3: Composition/information on ingredients

			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.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Stop if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : 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. See section 8 of this Safety Data Sheet for specifications.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
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

SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific measures identified.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

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.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See Section 8 of the safety data sheet (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.

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and material for containment and cleaning up : Stop leak if without risk. Absorb with liquid-binding material (sand, diatomite, universal binders etc.) or use a spill kit. Absorb spillage to prevent material damage. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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

SECTION 7: Handling and storage

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

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.

7.2 Conditions for safe storage, including any incompatibilities

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 in corrosive resistant container with a resistant inner liner. Store locked up. Separate from acids. Keep away from metals. 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)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
potassium hydroxide	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 2 mg/m³.
2-butoxyethanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 50 ppm. TWA 8 hours: 25 ppm. STEL 15 minutes: 246 mg/m³. TWA 8 hours: 123 mg/m³.
propan-2-ol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 1250 mg/m³. STEL 15 minutes: 500 ppm. TWA 8 hours: 999 mg/m³. TWA 8 hours: 400 ppm.

Biological exposure indices

No exposure indices known.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
potassium hydroxide	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
	DNEL	Long term Inhalation	1 mg/m³	General population	Local
sodium p-cumenesulphonate	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
	DNEL	Long term Dermal	7.6 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	53.6 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	3.8 mg/kg	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	13.2 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	3.8 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.048 mg/cm²	General population	Local
	DNEL	Long term Dermal	0.096 mg/cm²	Workers	Local
	DNEL	Long term Oral	3.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	6.6 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	37.4 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	68.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	191 mg/kg bw/day	Workers	Systemic

SECTION 8: Exposure controls/personal protection

2-butoxyethanol	DNEL	Short term Inhalation	246 mg/m³	Workers	Local
	DNEL	Short term Inhalation	633 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	89 mg/kg	Workers	Systemic
	DNEL	Long term Dermal	75 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	231 mg/m³	General population [Consumers]	Local
	DNEL	Short term Inhalation	426 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	49 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	38 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	44.5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	3.2 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Oral	13.4 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	633 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	6.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	26.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	59 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m³	General population	Local
	DNEL	Short term Inhalation	246 mg/m³	Workers	Local
	DNEL	Short term Inhalation	426 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	1091 mg/m³	Workers	Systemic
propan-2-ol	DNEL	Long term Inhalation	500 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	89 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	26 mg/kg	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	500 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	26 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	51 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	89 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	178 mg/m³	General population	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	1000 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
sodium p-cumenesulphonate	Fresh water	0.23 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
2-butoxyethanol	Fresh water sediment	8.14 mg/kg	-
	Soil	2.8 mg/kg	-
	Sewage Treatment Plant	463 mg/l	-
	Marine water sediment	3.46 mg/kg	-
	Fresh water	8.8 mg/l	-
propan-2-ol	Fresh water	140.9 mg/l	-
	Marine water	140.9 mg/l	-
	Fresh water sediment	552 mg/kg	-
	Marine water sediment	552 mg/kg	-
	Soil	28 mg/kg	-
	Sewage Treatment Plant	2251 mg/l	-

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Chemical splash goggles or face shield. Safety glasses with side shields.

Skin protection

Hand protection : Wear suitable gloves tested to EN374. Gloves nitrile rubber > 0.35 mm thickness.

Body protection : Wear suitable protective clothing. Wear chemical resistant clothing if direct skin exposure and/or splashing may occur. Under normal conditions of handling and use, no additional skin protection measures should be necessary.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use.

SECTION 8: Exposure controls/personal protection

Environmental exposure controls : Do not release undiluted and unneutralised into the sewer.

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 : Green. [Transparent]

Odour : Characteristic.

Odour threshold : Not determined.

Melting point/freezing point : <5°C

Initial boiling point and boiling range : >100°C

Flammability (solid, gas) : Not applicable.

Upper/lower flammability or explosive limits : Not determined.

Flash point : Closed cup: 72°C
Open cup: Not applicable.

Auto-ignition temperature :

Ingredient name	°C	Method
sodium p-cumenesulphonate	>400	EU A.16
2-butoxyethanol	230	DIN 51794
Isotridecanol, ethoxylated	250	ASTM E 659-78

pH : 13.5 [Conc. (% w/w): 100%]

Viscosity : Not determined.

Solubility(ies) :

Media	Result
cold water	Easily soluble
hot water	Easily soluble

Solubility in water : Not determined.

Miscible with water : Yes.

Partition coefficient: n-octanol/water : Not determined.

Vapour pressure :

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
water	17.5	2.3				
2-butoxyethanol	0.75006	0.1				
propan-2-ol	33.00268	4.4				

Evaporation rate : Not determined.

Relative density : 1.09

Density : Not available.

Vapour density : Not determined.

Explosive properties : Not determined.

Oxidising properties : No oxidising ingredients present.

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 : No specific data.

10.5 Incompatible materials : Reactive or incompatible with the following materials:
acids
metals

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
potassium hydroxide	LD50 Oral	Rat	333 mg/kg	-
sodium p-cumenesulphonate	LD50 Dermal	Rabbit	2001 mg/kg	-
	LD50 Oral	Rat	2001 mg/kg	-
2-butoxyethanol	LD50 Oral	Rat	917 mg/kg	-
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary : Not available.

2.1 Classification of the substance or mixture

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Cleanol-HD	3746.8	N/A	N/A	60.0	N/A
potassium hydroxide	333	N/A	N/A	N/A	N/A
sodium p-cumenesulphonate	2001	2001	N/A	N/A	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
propan-2-ol	5000	12800	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
potassium hydroxide	Eyes - Moderate irritant	Rabbit	-	24 hours 1 mg	-
	Skin - Severe irritant	Guinea pig	-	24 hours 50 mg	-
	Skin - Severe irritant	Human	-	24 hours 50 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 50 mg	-
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
propan-2-ol	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-

SECTION 11: Toxicological information

	Eyes - Severe irritant Skin - Mild irritant	Rabbit Rabbit	- -	mg 100 mg 500 mg	- -

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No additional remark.

Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	-	Narcotic effects

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

None of the components are listed.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
sodium p-cumenesulphonate	EC50 100 mg/l	Algae	96 hours
	EC50 100 mg/l	Daphnia	48 hours
	LC50 100 mg/l	Fish	96 hours
2-butoxyethanol	Acute EC50 >1000 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 800 mg/l Marine water	Crustaceans - *Crangon crangon*	48 hours
	Acute LC50 1250 ppm Marine water	Fish - *Menidia beryllina*	96 hours
propan-2-ol	Acute EC50 7550 mg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours

SECTION 12: Ecological information

	Acute LC50 1400 mg/l Marine water Acute LC50 4200 mg/l Fresh water	Crustaceans - *Crangon crangon* Fish - *Rasbora heteromorpha*	48 hours 96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Not available.
sodium p-cumenesulphonate propan-2-ol	OECD 301 OECD 301E	>60 % - Readily - 28 days 95 % - 21 days	- -	- -

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
sodium p-cumenesulphonate propan-2-ol	- -	- -	Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
sodium p-cumenesulphonate 2-butoxyethanol propan-2-ol	-1.1 0.81 0.05	- - -	Low Low Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : 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 Endocrine disrupting properties

None of the components are listed.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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 : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
07 06 00	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics

SECTION 13: Disposal considerations

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.

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	UN1814	UN1814	UN1814	UN1814
14.2 UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	Potassium hydroxide solution
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

ADR/RID : **Hazard identification number** 80
Limited quantity 1 L
Tunnel code (E)

IMDG : **Emergency schedules** F-A, S-B

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840.
Special provisions A3, A803

14.6 Special precautions for user : **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 instruments : Not available.

SECTION 15: Regulatory information

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

15.2 Chemical safety assessment : Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
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 according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Met. Corr. 1, H290	On basis of test data
Skin Corr. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
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.
H336	May cause drowsiness or dizziness.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Met. Corr. 1	CORROSIVE TO METALS - Category 1
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing : 12/23/2024

Date of issue/ Date of revision : 12/23/2024

Date of previous issue : 12/12/2022

Version : 2

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