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

1.1. Product identifier

Product form	:	Mixtures
Trade name	:	Det&Rinse
Product code	:	DB1016A0

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

1.2.1. Relevant identified uses

Main use category	:	Detergents
Industrial/Professional use spec	:	Professional
Use of the substance/mixture	:	Oven cleaners

1.2.2. Uses advised against

Any use that is not described in this sheet and in the technical documentation is to be considered incorrect/not recommended

1.3. Details of the supplier of the safety data sheet

UNOX SpA
VIA MAJORANA ,22
35010 Cadoneghe - Italy
T +39 049 86.57.511 - F +39 049 86.57.555
Det.Rinse@unox.it

1.4. Emergency telephone number

Emergency number (24h/24)	:	Tel. (+)1 760 476 3961 Tel (+)0-800-680-0425 (only UK) Access Code: 334577
National Poisons Information Service (NPIS)		Email: director.birmingham.unit@npis.org Website: http://www.npis.org/

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05

Signal word (CLP)	:	Danger
Hazardous ingredients	:	potassium hydroxide, caustic potash
Hazard statements (CLP)	:	H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage
Precautionary statements (CLP)	:	P264 - Wash hands, forearms and face thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting 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 P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Det&Rinse
Safety Data Sheet

according to Regulation (EU) 2015/830

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Dipropylene glycol monomethyl ether- substance with a Community workplace exposure limit	(CAS No) 34590-94-8 (EC no) 252-104-2 (REACH-no) 01-2119450011-60	1 - 5	Not classified
potassium hydroxide, caustic potash	(CAS No) 1310-58-3 (EC no) 215-181-3 (EC index no) 019-002-00-8 (REACH-no) 01-2119487136-33	1 - 4.5	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Alcohols, C12-14, ethoxylated propoxylated	(CAS No) 68439-51-0 (EC no) 614-484-1 (REACH-no) Not available	1 - 3	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
D-Glucopyranose, oligomeric, decyl octyl glycosides	(CAS No) 68515-73-1 (EC no) 500-220-1 (REACH-no) 01-2119488530-36	1 - 3	Eye Dam. 1, H318 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
potassium hydroxide, caustic potash	(CAS No) 1310-58-3 (EC no) 215-181-3 (EC index no) 019-002-00-8 (REACH-no) 01-2119487136-33	(0.5 =<C < 2) Skin Irrit. 2, H315 (0.5 =<C < 2) Eye Irrit. 2, H319 (2 =<C < 5) Skin Corr. 1B, H314 (C >= 5) Skin Corr. 1A, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	Self-protection of the first aider.
First-aid measures after inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention immediately.
First-aid measures after skin contact	:	Immediately rinse with plenty of water (for at least 15 minutes). Remove contaminated clothing immediately and dispose of safely. Wash contaminated clothing before reuse. Seek medical attention immediately.
First-aid measures after eye contact	:	In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.
First-aid measures after ingestion	:	Immediately call a POISON CENTER or doctor/ physician. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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

Symptoms/injuries after inhalation	:	Corrosive to respiratory system. Causes burns.
Symptoms/injuries after skin contact	:	Causes severe burns.
Symptoms/injuries after eye contact	:	Causes serious eye damage. Corneal opacity. Iris lesions.
Symptoms/injuries after ingestion	:	Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

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

Keep under medical supervision for at least 48 hours. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Water fog. carbon dioxide (CO2), dry chemical powder, foam.

Unsuitable extinguishing media	:	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	On burning: release of (highly) toxic gases/vapours.
Explosion hazard	:	None known.
Hazardous decomposition products in case of fire	:	Hazardous combustion products. On combustion forms: carbon oxides (CO and CO2).

5.3. Advice for firefighters

Precautionary measures fire	:	Evacuate the personnel away from the fumes.
Firefighting instructions	:	Cool down the containers exposed to heat with a water spray. Move undamaged containers from immediate hazard area if it can be done safely.
Protective equipment for firefighters	:	Extra personal protection: complete protective clothing including self-contained breathing apparatus.
Other information	:	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	:	Wear personal protection equipment. Do not attempt to take action without suitable protective equipment.
Emergency procedures	:	Immediately contact emergency personnel. Eliminate all ignition sources if safe to do so. Spilled material may present a slipping hazard.

6.1.2. For emergency responders

Protective equipment	:	Wear suitable protective clothing, gloves and eye/face protection. Do not attempt to take action without suitable protective equipment. In presence of product's residue, total impervious protective suits, gloves, and boots must be worn.
Emergency procedures	:	Evacuate unnecessary personnel. Eliminate all ignition sources if safe to do so. Spilled material may present a slipping hazard. Avoid inhalation of vapours. Ventilate affected area. Consult an expert.

6.2. Environmental precautions

Avoid release to the environment. Avoid sub-soil penetration. Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

For containment	:	Stop leak if safe to do so. Recover small spills with a suitable absorbent, like diatomaceous earth. Recover large spills by pumping (use an explosion proof or hand pump).
Methods for cleaning up	:	Ventilate affected area. Wear personal protection equipment. Collect in closed containers for disposal. Wash with plenty of soap and water. Consult the appropriate authorities about waste disposal. Wash contaminated area with large amounts of water.
Other information	:	Do not allow uncontrolled discharge of product into the environment.

6.4. Reference to other sections

For disposal of residues refer to section 13 : Disposal considerations. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from sources of ignition - No smoking. Take any precaution to avoid mixing with Incompatible materials. Open and handle container with care. Ensure operatives are trained to minimise exposures. Avoid formation of vapours.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Provide adequate ventilation.
Storage conditions	:	Store tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight.
Incompatible materials	:	Acids. alkali. oxidizing agents. Flammable materials. Peroxides.
Storage temperature	:	5 - 40 °C
Heat and ignition sources	:	Keep away from open flames, hot surfaces and sources of ignition.
Prohibitions on mixed storage	:	Keep away from food, drink and animal feeding stuffs.
Storage area	:	Use explosion-proof lighting equipment.
Packaging materials	:	stainless steel. Polyvinylchloride (PVC) . Polyethylene. Teflon. Neoprene. Unsuitable material: Do not use aluminum, tin or zinc containers, Copper, Lead, Tin (inorganic compounds).

Det&Rinse
Safety Data Sheet
according to Regulation (EU) 2015/830

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Dipropylene glycol monomethyl ether- (34590-94-8)		
EU	IOELV TWA (mg/m³)	308 mg/m³
EU	IOELV TWA (ppm)	50 ppm
Austria	MAK (mg/m³)	307 mg/m³ (mixed isomers)
Austria	MAK (ppm)	50 ppm (mixed isomers)
Austria	MAK Short time value (mg/m³)	614 mg/m³ (isomers mixtures)
Austria	MAK Short time value (ppm)	100 ppm (isomers mixtures)
Belgium	Limit value (mg/m³)	308 mg/m³
Belgium	Limit value (ppm)	50 ppm
Bulgaria	OEL TWA (mg/m³)	308 mg/m³
Bulgaria	OEL TWA (ppm)	50 ppm
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	308 mg/m³
Croatia	GVI (granična vrijednost izloženosti) (ppm)	50 ppm
Cyprus	OEL TWA (mg/m³)	308 mg/m³
Cyprus	OEL TWA (ppm)	50 ppm
Czech Republic	Expoziční limity (PEL) (mg/m³)	270 mg/m³
Denmark	Grænseværdie (langvarig) (mg/m³)	309 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Estonia	OEL TWA (mg/m³)	308 mg/m³
Estonia	OEL TWA (ppm)	50 ppm
Finland	HTP-arvo (8h) (mg/m³)	310 mg/m³
Finland	HTP-arvo (8h) (ppm)	50 ppm
France	VME (mg/m³)	308 mg/m³ (restrictive limit)
France	VME (ppm)	50 ppm (restrictive limit)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	310 mg/m³ (isomer mixture)
Germany	TRGS 900 Occupational exposure limit value (ppm)	50 ppm (isomer mixture)
Gibraltar	OEL TWA (mg/m³)	308 mg/m³
Gibraltar	OEL TWA (ppm)	50 ppm
Greece	OEL TWA (mg/m³)	600 mg/m³
Greece	OEL TWA (ppm)	100 ppm
Greece	OEL STEL (mg/m³)	900 mg/m³
Greece	OEL STEL (ppm)	150 ppm
Hungary	AK-érték	308 mg/m³
Hungary	CK-érték	308 mg/m³ (Substances with European indicative limits (96/94/EC, 2000/39/EC, 2006/15/EC, 2009/161/EU), which currently has no peak limit concentration. In these cases, Annex 3.1. should be used exercised)
Ireland	OEL (8 hours ref) (mg/m³)	308 mg/m³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m3)	924 mg/m³ (calculated)
Ireland	OEL (15 min ref) (ppm)	150 ppm (calculated)
Italy	OEL TWA (mg/m³)	308 mg/m³
Italy	OEL TWA (ppm)	50 ppm
Latvia	OEL TWA (mg/m³)	308 mg/m³
Latvia	OEL TWA (ppm)	50 ppm
Lithuania	IPRV (mg/m³)	300 mg/m³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m³)	450 mg/m³
Lithuania	TPRV (ppm)	75 ppm
Malta	OEL TWA (mg/m³)	308 mg/m³

Dipropylene glycol monomethyl ether- (34590-94-8)		
Malta	OEL TWA (ppm)	50 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	300 mg/m³
Poland	NDS (mg/m³)	240 mg/m³ (mixture of isomers)
Poland	NDSCh (mg/m³)	480 mg/m³ (mixture of isomers: Propanol, 1(or 2)-(2-methoxymethylethoxy)-, Propanol, 1-(1-methoxymethylethoxy)
Portugal	OEL TWA (mg/m³)	308 mg/m³ (indicative limit value)
Portugal	OEL TWA (ppm)	50 ppm (indicative limit value)
Portugal	OEL STEL (ppm)	150 ppm
Romania	OEL TWA (mg/m³)	308 mg/m³
Romania	OEL TWA (ppm)	50 ppm
Slovakia	NPHV (priemerná) (mg/m³)	308 mg/m³
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	568 mg/m³
Slovenia	OEL TWA (mg/m³)	308 mg/m³
Slovenia	OEL TWA (ppm)	50 ppm
Spain	VLA-ED (mg/m³)	308 mg/m³ (indicative limit value)
Spain	VLA-ED (ppm)	50 ppm (indicative limit value)
Sweden	nivågränsvärde (NVG) (mg/m³)	300 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	450 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	75 ppm
United Kingdom	WEL TWA (mg/m³)	308 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	924 mg/m³ (calculated)
United Kingdom	WEL STEL (ppm)	150 ppm (calculated)
Norway	Grenseverdier (AN) (mg/m³)	300 mg/m³
Norway	Grenseverdier (AN) (ppm)	50 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	300 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	50 ppm
Switzerland	VME (mg/m³)	300 mg/m³
Switzerland	VME (ppm)	50 ppm
Switzerland	VLE (mg/m³)	300 mg/m³
Switzerland	VLE (ppm)	50 ppm
Australia	TWA (mg/m³)	308 mg/m³
Australia	TWA (ppm)	50 ppm
Canada (Quebec)	VECD (mg/m³)	909 mg/m³
Canada (Quebec)	VECD (ppm)	150 ppm
Canada (Quebec)	VEMP (mg/m³)	606 mg/m³
Canada (Quebec)	VEMP (ppm)	100 ppm
USA - ACGIH	ACGIH TWA (ppm)	100 ppm
USA - ACGIH	ACGIH STEL (ppm)	150 ppm
USA - IDLH	US IDLH (ppm)	600 ppm
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	600 mg/m³
USA - NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA - NIOSH	NIOSH REL (STEL) (mg/m³)	900 mg/m³
USA - NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m³)	600 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	100 ppm

Det&Rinse
Safety Data Sheet
according to Regulation (EU) 2015/830

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Personal protective equipment:

Safety glasses. Gloves. Protective clothing. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

Materials for protective clothing:

Rubbers. PVC (Polyvinyl chloride). Natural fibres (e.g. cotton). EN ISO 20344

Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Break through time: ≥ 480 min. Thickness of glove material: 0.4-0.5 mm. Chemical resistant gloves (nitrile-rubber, PVC, neoprene)

Eye protection:

Wear eye glasses with side protection according to EN 166. Do not wear contact lenses

Skin and body protection:

Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent). Wear work clothes with long sleeves. EN ISO 20344

Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. Wear a respirator conforming to EN140 with Type A/P2 filter or better. EN 14387. Combination filtering device (DIN EN 141)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	straw yellow.
Odour	:	characteristic.
Odour threshold	:	No data available
pH	:	14 at 20°C
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 100 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not flammable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	1.1 - 1.25 kg/l
Solubility	:	soluble in water.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not expected to be explosive as none of the components is classified as explosive.
Oxidising properties	:	Not oxidising.
Explosive limits	:	No data available

9.2. Other information

VOC content	:	4.6 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts exothermically with (some) acids. Reacts with (strong) oxidizers.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

Keep away from acids. Oxidizing agent. Peroxides.

10.5. Incompatible materials

Acids. Oxidizing agent. Peroxides. Flammable materials.

10.6. Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases : Nitrogen oxides (NOx). Carbon dioxide (CO2). Phosphorus oxides. Sulfur oxides. Pyrolysis products, toxic.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

potassium hydroxide, caustic potash (1310-58-3)	
LD50 oral rat	333 mg/kg

Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
LD50 oral rat	> 2000 mg/kg

D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)	
LD50 oral rat	> 2000 mg/kg (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Dipropylene glycol monomethyl ether- (34590-94-8)	
LD50 oral rat	5400 mg/kg
LD50 dermal rat	> 13000 mg/kg

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 14 at 20°C

Serious eye damage/irritation : Causes serious eye damage.
pH: 14 at 20°C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

potassium hydroxide, caustic potash (1310-58-3)	
LC50 fish 1	80 mg/l Gambusia affinis

Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
LC50 fish 1	1 - 10 mg/l (OECD 203 method)
EC50 Daphnia 1	1 - 10 (OECD 202 method)
EC50 other aquatic organisms 1	> 10000 mg/l Bacteria toxicity
EC50 72h algae (1)	0.1 - 1 mg/l (OECD 201 method)
EC50 72h algae (2)	1 - 10 mg/l (OECD 201 method)

D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)	
LC50 fish 1	> 100 mg/l Brachydario rerio
EC50 Daphnia 1	10 - 100 mg/l
EC50 72h algae (1)	10 - 100 mg/l Scenedesmus subspicatus

Det&Rinse
Safety Data Sheet
according to Regulation (EU) 2015/830

D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)	
NOEC chronic fish	1.8 mg/l Brachydanio rerio
NOEC chronic crustacea	1 mg/l Daphinia Magna

Dipropylene glycol monomethyl ether- (34590-94-8)	
LC50 fish 1	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	1919 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	4168 mg/l Active sludge
EC50 72h algae (1)	> 969 mg/l Pseudokirchneriella subcapitata

12.2. Persistence and degradability

potassium hydroxide, caustic potash (1310-58-3)	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

Dipropylene glycol monomethyl ether- (34590-94-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 day

12.3. Bioaccumulative potential

Det&Rinse	
Bioaccumulative potential	Low bioaccumulation potential.

potassium hydroxide, caustic potash (1310-58-3)	
Bioaccumulative potential	No bioaccumulation.

Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
Log Pow	< 1.77
Bioaccumulative potential	No bioaccumulation.

Dipropylene glycol monomethyl ether- (34590-94-8)	
Log Pow	0.004
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

Det&Rinse	
Ecology - soil	Expected to be highly mobile in soil.

12.5. Results of PBT and vPvB assessment

Det&Rinse	
Results of PBT assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Reuse or recycle following decontamination. External recovery and recycling of waste should comply with applicable local and/or national regulations. Recycling is preferred to disposal or incineration.

Waste disposal recommendations : Dispose of this material and its container at hazardous or special waste collection point.

HP Code : HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye
HP8 - "Corrosive:" waste which on application can cause skin corrosion

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1814	1814	1814	1814	1814
14.2. UN proper shipping name				
POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	Potassium hydroxide solution	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION
Transport document description				
UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, III, (E)	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, III	UN 1814 Potassium hydroxide solution, 8, III	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, III	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, III

ADR	IMDG	IATA	ADN	RID
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Limited quantities (ADR) : 5L
Transport category (ADR) : 3
Tunnel restriction code (ADR) : E

- Transport by sea

Limited quantities (IMDG) : 5L
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A

- Air transport

PCA Limited quantities (IATA) : Y841
PCA packing instructions (IATA) : 852
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

VOC content : 4.6 %
Regulation EC 648/2004 : Contains: 5% - 15 % phosphates
Contains: < 5% anionic surfactants, amphoteric surfactants, non-ionic surfactants

Seveso Information : None

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed

Det&Rinse
Safety Data Sheet
according to Regulation (EU) 2015/830

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out
potassium hydroxide, caustic potash D-Glucopyranose, oligomeric, decyl octyl glycosides

SECTION 16: Other information

Abbreviations and acronyms:

SDS	Safety Data Sheet
	CAS - Chemical Abstracts Service
	GHS - Globally Harmonised System
	CSR - Chemical Safety Report
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	PVC (Polyvinyl chloride).
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

Other information : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Met. Corr. 1	H290	Calculation method
Skin Corr. 1A	H314	On basis of test data
Eye Dam. 1	H318	Calculation method

SDS EU (REACH Annex II)

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Det&Rinse
Safety Data Sheet
according to Regulation (EU) 2015/830

EXPOSURE SCENARIO POTASSIUM HYDROXIDE

Short title of Exposure Scenario: Professional use	
Sector of use (SU).	SU 22
Product category (PC).	PC35
Process category (PROC).	PROC2
Environment release category (ERC).	ERC8a
Contributing scenario controlling environmental exposure	
Product characteristics.	Covers concentrations up to 100%
Frequency and duration of use.	Continued exposure
Technical and specific conditions on-site to reduce or limit the drainage, emissions to the air and discharge to the earth.	A regular check of the pH is required in case of drainage into open waters. In general the drainage should take place in such a way as to minimize any modifications to the pH of the surface water. In general the majority of aquatic organisms are able to tolerate pH values between 6-9, as reported in the description of the OECD standard tests on aquatic organisms. The measures of risk management for the environment are aimed at avoiding drainage into public drainage systems or surface water, in the event in which such discharges would be able to cause significant changes to the pH.
Conditions and measures regarding the external treatment of waste for disposal.	The waste must be reused or discharged into industrial water drains and neutralized, if necessary.
Contributing scenario controlling worker exposure	
Product characteristics	Covers concentrations up to 100%
Quantity used	0,6 kg
Duration of exposure (per day)	>240 min
Technical conditions and measures at process level (source) to prevent release	Substitute manual procedures with automatic procedures where possible. Use closed systems or covered open systems. Use suction pumps. Transfer via closed circuit lines. Ensure that the transfer of materials is subject to containment measures or under suction ventilation. Adopt good standards of general ventilation. Natural ventilation comes from doors, windows. Controlled ventilation means air that is supplied from or extracted from an electrically powered ventilator. Avoid spray. Reduction of volumes of liquid in wells to prevent/collect any possible spills.
Organizational measures to prevent /limit releases, dispersion and exposure	Workers present in areas of risk or involved in working processes that are at risk must be training to: a) avoid working without protection of the respiratory tract, b) understand the corrosive properties and, particularly the effects of inhalation, c) follow the safety instructions given by the employer. The employer must make sure that the required PPE are available and are used according to their relative instructions. Substitute, where possible, manual processes with automatic processes and/or closed circuits. This would prevent the formation of fogs and aerosols that are irritants and potential sprays. Check the potential exposure using measures such as closed or autonomous systems, well equipped and maintained equipment and a plentiful general ventilation, discharge the systems and empty the pipelines before opening the installation. As far as possible, empty and rinse the equipment before carrying out any maintenance work. In case there is potential for exposure, ensure that the workers involved are informed on the nature of the exposure and on the fundamental methods to minimize the exposure. Ensure that the required personal protective equipment is available. Collect the spilled material and dispose of the waste according to the precautions foreseen by the law. Monitor the effectiveness of the control measures. Evaluate the necessity of monitoring health. Identify and implement collective measures. Ensure that the control measures are regularly checked and respected. On-site checks to make sure that the risk managements measures are used in the correct way and that the operative conditions are followed.
Conditions and measures related to personal protection, hygiene and health evaluation	In the event of the formation of powders or aerosols use PPE to protect the respiratory tract with the appropriate filter (P2). Wear suitable EN374 approved gloves. Wear safety glasses with side protection according to EN 166. Wear suitable protective clothing, aprons, shields and overalls. In the event of risk of spray: wear rubber boots.
Exposure estimation and reference to its source	
Environment	The substance dissociates on contact with water, the only effect is an increase in pH, therefore after having passed through the water treatment plant the exposure is to be considered negligible and without any risk.
Workers (ECETOC TRA model)	

Contributing scenario	Specific conditions	Method of exposure	Level of exposure	PNEC	RCR
PROC2	Liquid	Inhalation	0,23 mg/m³	1 mg/m³	0,23
Guidance to DU to evaluate whether he works inside the boundaries set by the ES					
If no measured data is available, the downstream user can use scaling instrument such as ECETOC TRA. Important note: showing a safe use, with respect to the estimated exposure with DNEL in the long term, the acute DNEL is also covered (according to guide R.14, it is possible to deduce the acute levels of exposure by multiplying the estimate long term exposure by a factor of 2). The exposure by inhalation is estimated with ECETOC TRA. For the scaling see: http://ecetoc.org/tra. Only correctly trained personnel should use scaling methods to see if the operative conditions and risk management are within the limits indicated in the exposure scenario.					
Additional advice for good practice					
It is assumed that adequate standards for hygiene in the workplace are adopted.					