

# Det&Rinse ECO

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/07/2016

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Supersedes: 14/07/2016

Version: 2.0

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Det&Rinse ECO  
Product code : DB1018A0

#### 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 technical document 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](mailto:Det.Rinse@unox.it)

#### 1.4. Emergency telephone number

Emergency number : (+)1 760 476 3961 24/24 (Access code: 334577)

### 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

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) : 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  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water Take a shower  
P363 - Wash contaminated clothing before reuse  
P501 - Dispose of contents and container to comply with applicable local, national and international regulation.

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### 2.3. Other hazards not contributing to the classification

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]
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	15	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Heptyl D-glucoside	(CAS-No.) 100231-64-9 (EC-No.) 309-364-8 (REACH-no) Not available	4 - 6	Eye Dam. 1, H318
Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt	(EC-No.) 939-625-7 (REACH-no) 01-2119985168-23	1 - 2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Oxirane, 2-methyl-, polymer with oxirane, mono(2-propylheptyl) ether	(EC-No.) 944-523-0 (REACH-no) Exempt	1.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319

#### 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) Eye Irrit. 2, H319 ( 0.5 =<C < 2) Skin Irrit. 2, H315 ( 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/effects after inhalation	: Corrosive to respiratory system. Causes burns.
Symptoms/effects after skin contact	: Causes severe burns.
Symptoms/effects after eye contact	: Causes serious eye damage. Corneal opacity. Iris lesions.
Symptoms/effects 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 (CO <sub>2</sub> ), 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	: On combustion forms: carbon oxides (CO and CO <sub>2</sub> ).

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### 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.
- Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.
- Information on mixed storage : Keep away from food, drink and animal feeding stuffs.
- Storage area : Use explosion-proof lighting equipment.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

potassium hydroxide, caustic potash (1310-58-3)		
Austria	MAK (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Belgium	Short time value (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

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potassium hydroxide, caustic potash (1310-58-3)		
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (NPK-P) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Estonia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Finland	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
France	VLE (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Greece	OEL TWA (mg/m <sup>3</sup> )	2
Greece	OEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Hungary	AK-érték	2 mg/m <sup>3</sup>
Hungary	CK-érték	2 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Poland	NDS (mg/m <sup>3</sup> )	0.5 mg/m <sup>3</sup>
Poland	NDSch (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Poland	NDSP (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Spain	VLA-EC (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	1
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	2
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	2

### 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). Breakthrough 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:

Wear chemical resistant apron. EN 14605. 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	: No data available
Odour	: characteristic.
Odour threshold	: No data available
pH	: 13.5 at 24°C

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Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: No data available
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	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive as none of the components is classified as explosive or oxidizing.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## 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 (strong) acids.

### 10.5. Incompatible materials

Acids.

### 10.6. Hazardous decomposition products

None known under normal conditions of use.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### potassium hydroxide, caustic potash (1310-58-3)

LD50 oral rat	333 mg/kg
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#### Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt

LD50 oral rat	1550 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 13.5 at 24°C
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 13.5 at 24°C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

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STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

potassium hydroxide, caustic potash (1310-58-3)	
LC50 fish 1	80 mg/l Gambusia affinis
Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt	
LC50 fish 1	10 - 100 mg/l
EC50 Daphnia 1	10 - 100 mg/l
EC50 72h Algae [mg/l] (1)	10 - 100 mg/l

#### 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.
Heptyl D-glucoside (100231-64-9)	
Persistence and degradability	Readily biodegradable.
Biodegradation	82.52 % 28 days (OCDE 301F)

#### 12.3. Bioaccumulative potential

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Bioaccumulative potential	Low bioaccumulation potential.
potassium hydroxide, caustic potash (1310-58-3)	
Bioaccumulative potential	No bioaccumulation.
Heptyl D-glucoside (100231-64-9)	
Log Pow	0.44

#### 12.4. Mobility in soil

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Ecology - soil	Expected to be highly mobile in soil.

#### 12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

#### 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.
Product/Packaging 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,	UN 1814 POTASSIUM HYDROXIDE SOLUTION,	UN 1814 Potassium	UN 1814 POTASSIUM HYDROXIDE SOLUTION,	UN 1814 POTASSIUM HYDROXIDE SOLUTION,

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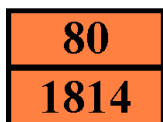
according to Regulation (EU) 2015/830

ADR	IMDG	IATA	ADN	RID
8, II, (E)	8, II	hydroxide solution, 8, II	8, II	8, II
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
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) : 11  
Excepted quantities (ADR) : E2  
Orange plates :



Tunnel restriction code (ADR) : E  
EAC code : 2R

#### - Transport by sea

Limited quantities (IMDG) : 1 L  
Excepted quantities (IMDG) : E2  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-B  
Properties and observations (IMDG) : Colourless liquid. Reacts with ammonium salts, evolving ammonia gas. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

#### - Air transport

PCA max net quantity (IATA) : 1L

#### - Inland waterway transport

Classification code (ADN) : C5  
Limited quantities (ADN) : 1 L

#### - Rail transport

Limited quantities (RID) : 1L

### 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

Other information, restriction and prohibition regulations : Regulation (EC) No. 648/2004 (Detergents regulation). Contains: 5% - 15% non-ionic surfactants  
Contains: < 5% anionic surfactants, amphoteric surfactants, phosphonates.

Seveso Information : None

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### 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 : Heptyl D-glucoside is listed  
SZW-lijst van mutagene stoffen : Heptyl D-glucoside is listed  
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

## 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
Eye Dam. 1	Serious eye damage/eye irritation, Category 1



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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
Skin Irrit. 2	Skin corrosion/irritation, Category 2
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

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

Met. Corr. 1	H290	Expert judgment
Skin Corr. 1A	H314	On basis of test data

SDS EU (REACH Annex II)

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