



# REACT

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Date of issue: 15/06/2015

Revision date: 05/06/2015

Version: 10.0

REACT

H018

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : REACT  
Product code : H018  
Type of product : Technical product

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Acidic descaling toilet cleaner

##### 1.2.2. Uses advised against

No additional information available

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

SELDEN RESEARCH LIMITED STADEN LANE, BUXTON, DERBYSHIRE, SK17 9RZ, UNITED KINGDOM  
Tel: 01298 26226 Fax: 01298 26540 Email: safety@selden.co.uk

#### 1.4. Emergency telephone number

Emergency number : Mon to Fri 8.30am to 5.00pm - 01298 26226

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Skin Corr. 1A H314

Full text of H-phrases: see section 16

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger  
Hazardous ingredients : hydrogen chloride  
Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage  
Precautionary statements (CLP) : P271 - Use only outdoors or in a well-ventilated area  
P264 - Wash hands thoroughly after handling  
P280 - Wear eye protection, protective gloves  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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  
P315 - Get immediate medical advice/attention  
P405 - Store locked up

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

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**3.2. Mixture**

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrogen chloride	(CAS No) 7647-01-0 (EC no) 231-595-7 (EC index no) 017-002-00-2	5 - 15	T; R23 C; R35	Press. Gas Acute Tox. 3 (Inhalation), H331 Skin Corr. 1A, H314
PEG-2 OLEAMINE	(CAS No) 25307-17-9 (EC no) 246-807-3	1 - 5	Not classified	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400

Full text of R- and H-phrases: see section 16

**SECTION 4: First aid measures****4.1. Description of first aid measures**

- First-aid measures general : Get medical advice/attention if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse.
- First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Get immediate medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Get medical advice/attention.

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

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Burns.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Burns.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

- Suitable extinguishing media : Carbon dioxide. Dry powder. Foam.

**5.2. Special hazards arising from the substance or mixture**

- Hazardous decomposition products in case of fire : Corrosive vapours.

**5.3. Advice for firefighters**

No additional information available

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

- Emergency procedures : Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

- Protective equipment : Use personal protective equipment as required.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

- For containment : Collect spillage.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

**6.4. Reference to other sections**

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

- Precautions for safe handling : Avoid contact with skin and eyes.
- Hygiene measures : Do not eat, drink or smoke when using this product.

**7.2. Conditions for safe storage, including any incompatibilities**

- Technical measures : Does not require any specific or particular technical measures.

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Storage conditions	: Keep container closed when not in use.
Incompatible products	: Strong bases. Oxidizing agent.
Incompatible materials	: Metals.
Special rules on packaging	: Keep only in original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Materials for protective clothing	: Not required for normal conditions of use
Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Not required for normal conditions of use
Respiratory protection	: Not required for normal conditions of use



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Mobile liquid.
Colour	: Blue.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 1
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	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.03
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

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### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

metals.

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 1
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 1
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR)	: 1789
UN-No. (IMDG)	: 1789
UN-No.(IATA)	: 1789

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: HYDROCHLORIC ACID
Proper Shipping Name (IMDG)	: HYDROCHLORIC ACID

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Proper Shipping Name (IATA) : HYDROCHLORIC ACID  
 Transport document description (ADR) : UN 1789 HYDROCHLORIC ACID, 8, II, (E)  
 Transport document description (IMDG) : UN 1789 HYDROCHLORIC ACID, 8, II

**14.3. Transport hazard class(es)**

**ADR**

Transport hazard class(es) (ADR) : 8  
 Danger labels (ADR) : 8



**IMDG**

Transport hazard class(es) (IMDG) : 8  
 Danger labels (IMDG) : 8



**IATA**

Transport hazard class(es) (IATA) : 8  
 Hazard labels (IATA) : 8



**14.4. Packing group**

Packing group (ADR) : II  
 Packing group (IMDG) : II  
 Packing group (IATA) : II

**14.5. Environmental hazards**

Dangerous for the environment : No  
 Marine pollutant : No  
 Other information : No supplementary information available

**14.6. Special precautions for user**

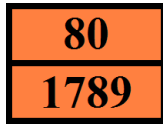
**- Overland transport**

Classification code (ADR) : C1  
 Special provisions (ADR) : 520  
 Limited quantities (ADR) : 1L  
 Excepted quantities (ADR) : E2  
 Packing instructions (ADR) : P001, IBC02  
 Mixed packing provisions (ADR) : MP15  
 Portable tank and bulk container instructions (ADR) : T8  
 Portable tank and bulk container special provisions (ADR) : TP2  
 Tank code (ADR) : L4BN  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 2

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Hazard identification number (Kemler No.) : 80  
 Orange plates :



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

**- Transport by sea**

Limited quantities (IMDG) : 1 L  
 Excepted quantities (IMDG) : E2  
 Packing instructions (IMDG) : P001  
 IBC packing instructions (IMDG) : IBC02  
 IBC special provisions (IMDG) : B20  
 Tank instructions (IMDG) : T8  
 Tank special provisions (IMDG) : TP2  
 EmS-No. (Fire) : F-A  
 EmS-No. (Spillage) : S-B  
 Stowage category (IMDG) : C

**- Air transport**

PCA Excepted quantities (IATA) : E2  
 PCA Limited quantities (IATA) : Y840  
 PCA limited quantity max net quantity (IATA) : 0.5L  
 PCA packing instructions (IATA) : 851  
 PCA max net quantity (IATA) : 1L  
 CAO packing instructions (IATA) : 855  
 CAO max net quantity (IATA) : 30L  
 Special provisions (IATA) : A3  
 ERG code (IATA) : 8L

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

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

**15.1.2. National regulations**

**Germany**

VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (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)

**Denmark**

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

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

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Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Press. Gas	Gases under pressure
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H400	Very toxic to aquatic life

### SDS EU

*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*