



# MD2

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010

Date of issue: 30/11/2015

Revision date: 30/11/2015

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Version: 10.1

MD2

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

#### 1.1. Product identifier

Product form : Mixture

Product name : MD2

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 : Machine dishwashing products: Detergent

##### 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

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 classification categories and H statements : 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 : sodium hydroxide, caustic soda

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : 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

#### 3.2. Mixture

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Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hydroxide, caustic soda	(CAS No) 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6 (REACH-no) 01-2119457892-27	5 - 15	C; R35	Skin Corr. 1A, H314

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

Hazardous decomposition products in case of fire	: Corrosive vapours.
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**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.
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**6.1.2. For emergency responders**

Protective equipment	: Use personal protective equipment as required.
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**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.
Storage conditions	: Keep container closed when not in use.
Incompatible products	: Oxidizing agent. Strong acids.
Incompatible materials	: Metals.

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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

sodium hydroxide, caustic soda (1310-73-2)		
Denmark	Local name	Natriumhydroxid
Denmark	Grænseværdi (langvarig) (mg/m³)	2 mg/m³
Denmark	Anmærkninger (DK)	L
Ireland	Local name	Sodium hydroxide
Ireland	OEL (15 min ref) (mg/m³)	2 mg/m³
United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m³)	2 mg/m³

### 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 : Liquid.

Colour : amber.

Odour : odourless.

Odour threshold : No data available

pH : 13

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 : 1.13

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

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**SECTION 10: Stability and reactivity****10.1. Reactivity**

No additional information available

**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: 13
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: 13
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**

sodium hydroxide, caustic soda (1310-73-2)	
LC50 fishes 1	> 35 mg/l
EC50 other aquatic organisms 1	> 33 mg/l
EC50 other aquatic organisms 2	IC50 algae (72 h) mg/l

**12.2. Persistence and degradability**

No additional information available

**12.3. Bioaccumulative potential**

sodium hydroxide, caustic soda (1310-73-2)	
Log Pow	-3.88

**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

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**14.1. UN number**

UN-No. (ADR) : 1824  
UN-No. (IMDG) : 1824  
UN-No.(IATA) : 1824

**14.2. UN proper shipping name**

Proper Shipping Name (ADR) : SODIUM HYDROXIDE SOLUTION  
Proper Shipping Name (IMDG) : SODIUM HYDROXIDE SOLUTION  
Proper Shipping Name (IATA) : SODIUM HYDROXIDE SOLUTION  
Transport document description (ADR) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E)  
Transport document description (IMDG) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

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

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

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**IMDG**

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

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**IATA**

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

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**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

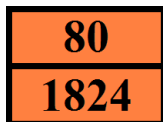
**14.6. Special precautions for user****- Overland transport**

Classification code (ADR) : C5  
Limited quantities (ADR) : 1L  
Excepted quantities (ADR) : E2  
Packing instructions (ADR) : P001, IBC02  
Mixed packing provisions (ADR) : MP15

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Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP2
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
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
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A

### - 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.
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## 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
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### 15.2. Chemical safety assessment

No additional information available

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**SECTION 16: Other information**

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

Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H314	Causes severe skin burns and eye damage

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*