

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

1.1. Product identifier

Product form : Mixture
Product name : MD5
Product code : F085
Type of product : Detergent

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

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 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 : 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. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	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	10 - 15	Skin Corr. 1A, H314
N,N-dimethyldecylamine N-oxide	(CAS-No.) 2605-79-0 (EC-No.) 220-020-5	0.1 - 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400

Full text of H-statements: 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 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/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects 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.
Storage conditions : Keep container closed when not in use.
Incompatible products : Oxidizing agent. Strong acids.

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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

sodium hydroxide; caustic soda (1310-73-2)

United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

8.2. Exposure controls

Materials for protective clothing:

Not required for normal conditions of use

Hand protection:

Chemical resistant gloves (according to European standard EN 374 or equivalent). Nitrile rubber gloves

Eye protection:

Safety glasses. EN 166

Skin and body protection:

Not required for normal conditions of use

Respiratory protection:

Not required for normal conditions of use

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
 Appearance : Liquid.
 Colour : light yellow.
 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 : >= 100 °C
 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 : 1.17
 Solubility : Soluble in water.
 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

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Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

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

sodium hydroxide; caustic soda (1310-73-2)

LC50 fish 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
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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

European List of Waste (LoW) code : 20 01 15* - alkalines

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SECTION 14: Transport information

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

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
 Transport document description (IATA) : UN 1824 Sodium hydroxide solution, 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

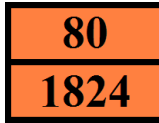
Overland transport

Classification code (ADR) : C5
 Limited quantities (ADR) : 1I
 Excepted quantities (ADR) : E2
 Packing instructions (ADR) : P001, IBC02
 Mixed packing provisions (ADR) : MP15
 Portable tank and bulk container instructions (ADR) : T7
 Portable tank and bulk container special provisions (ADR) : TP2

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

Detergent Regulation : Labelling of contents:

Component	%
non-ionic surfactants	<5%

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations**United Kingdom**

British National Regulations : Commission Regulation (EU) No. 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals.
 Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.
 Detergent Regulation (648/2004/EC).

15.2. Chemical safety assessment

No additional information available

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SECTION 16: Other information

Full text of H- and EUH-statements:	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

SDS EU (REACH Annex II)

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.