

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

1.1. Product identifier

Product form : Mixture
Trade name : MD5
UFI : 40N3-U0MP-Q003-6VJA
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 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

SELDEN EUROPE B.V.

WATERMOLEN 13
6229 PM
MAASTRICHT
NEDERLAND

Tel: 00 32 16 53 07 96
Email: info@selden.eu

1.4. Emergency telephone number

Mon to Fri 8.30am to 5.00pm - 01298 26226

Tel: 00 32 16 53 07 96

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 1, Sub-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

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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 or 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

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hydroxide; caustic soda substance with national workplace exposure limit(s) (IE, GB)	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	10 - 16	Skin Corr. 1A, H314
N,N-dimethyldecylamine N-oxide	(CAS-No.) 2605-79-0 (EC-No.) 220-020-5 (REACH-no) 01-2119959297-22	0.1 – 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400

Specific concentration limits:

Name	Product identifier	Specific concentration limits
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	(0.5 ≤C < 2) Skin Irrit. 2, H315 (0.5 ≤C < 2) Eye Irrit. 2, H319 (2 ≤C < 5) Skin Corr. 1B, H314 (5 ≤C ≤ 100) 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 : 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 skin with plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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.
Incompatible materials : Metals.
Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

sodium hydroxide; caustic soda (1310-73-2)	
Ireland - Occupational Exposure Limits	
Local name	Sodium hydroxide
OEL STEL	2 mg/m ³
United Kingdom - Occupational Exposure Limits	
Local name	Sodium hydroxide
WEL STEL (OEL STEL)	2 mg/m ³

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. EN 166

8.2.2.2. Skin protection

Skin and body protection:

Not required for normal conditions of use

Hand protection:

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

Other skin protection

Materials for protective clothing:

Not required for normal conditions of use

8.2.2.3. Respiratory protection

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Respiratory protection:

Not required for normal conditions of use

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: 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.
Partition coefficient n-octanol/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
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 of use.

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. Acids.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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. pH: 13
Serious eye damage/irritation	: Causes serious eye damage. 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

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

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

LC50 - Fish [1]	> 35 mg/l
EC50 - Other aquatic organisms [1]	> 33 mg/l waterflea

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water (Log Pow)	-3.88
---	-------

N,N-dimethyldodecylamine N-oxide (2605-79-0)

Partition coefficient n-octanol/water (Log Pow)	3.69
---	------

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

14.1 UN number

UN-No. (ADR) : UN 1824
 UN-No. (IMDG) : UN 1824
 UN-No. (IATA) : UN 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
 Danger labels (IATA) : 8



14.4. Packing group

Packing group (ADR) : II

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

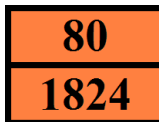
14.5. Environmental hazards

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
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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Detergent Regulation (648/2004/EC): Labelling of contents:	
Component	%
non-ionic surfactants	<5%

15.1.2. National regulations

United Kingdom

British National Regulations : Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.
Detergent Regulation (648/2004/EC).

15.2. Chemical safety assessment

No additional information available

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
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
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.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Corr. 1A	H314	Calculation method
Eye Dam. 1	H318	Calculation method

Safety Data Sheet (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.