

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

1.1. Product identifier

Product form : Mixture
Trade name : DYMASTAR
UFI : TTM3-U07W-3004-V6D6
Product code : J010
Type of product : Detergent

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

Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Machine dishwashing detergent

1.3. Details of the supplier of the safety data sheet

SELDEN RESEARCH LIMITED

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UNITED KINGDOM

Tel: 01298 26226
Email: safety@selden.co.uk

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WATERMOLEN 13
6229 PM
MAASTRICHT
NETHERLANDS

Tel: +31 (0) 43 363 42 89
Email: sds@selden.eu

1.4. Emergency telephone number

| Country/Area | Organisation/Company | Address | Emergency number | Comment |
|----------------|--|-----------------------------------|--|--------------------------------------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH | 0344 892 0111 | Only for healthcare professionals |

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 1B H314

Serious eye damage/eye irritation, Category 1 H318

Full text of H- and EUH-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

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| | |
|--------------------------------|--|
| Signal word (CLP) | : Danger |
| Contains | : sodium hydroxide; caustic soda |
| Hazard statements (CLP) | : H314 - Causes severe skin burns and eye damage. |
| Precautionary statements (CLP) | : 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

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

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 | 1 – 5 | 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 | Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411 Acute Tox. 4 (Oral), H302 |

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 \leq C < 2) Skin Irrit. 2; H315 (0.5 \leq C < 2) Eye Irrit. 2; H319 (2 \leq C < 5) Skin Corr. 1B; H314 (5 \leq C \leq 100) Skin Corr. 1A; H314 |

Full text of H- and EUH-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. |

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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

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

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.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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 |
| Remark | Advisory OELV (Advisory Occupational Exposure Limit Values) |
| Regulatory reference | Chemical Agents Code of Practice 2024 |
| United Kingdom - Occupational Exposure Limits | |
| Local name | Sodium hydroxide |
| WEL STEL (OEL STEL) | 2 mg/m ³ |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Wear eye protection. Safety glasses. ISO 16321-1

Skin protection

Skin and body protection:

Not required for normal conditions of use

Hand protection:

Wear protective gloves. Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Nitrile rubber gloves

Other skin protection

Materials for protective clothing:

Not required for normal conditions of use

Respiratory protection

Respiratory protection:

Not required for normal conditions of use

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---------------------|
| Physical state | : Liquid |
| Colour | : Colourless. |
| Appearance | : Liquid. |
| Odour | : odourless. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not available |
| Boiling point | : ≥ 100 °C |
| Flammability | : Not available |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : Not available |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : 13 |
| Viscosity, kinematic | : Not available |
| Solubility | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : 1.08 |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

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

Acids.

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 hazard classes as defined in Regulation (EC) No 1272/2008

| | |
|-------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |

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Acute toxicity (inhalation) : Not classified

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

| | |
|-------------|-------------------------|
| LD50 oral | > 300 mg/kg bodyweight |
| LD50 dermal | > 2000 mg/kg bodyweight |

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

11.2. Information on other hazards

No additional information available

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 |

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

| | |
|------------------------------------|--------------------|
| LC50 - Fish [1] | > 10 mg/l |
| EC50 - Other aquatic organisms [1] | 4.4 mg/l waterflea |
| EC50 - Other aquatic organisms [2] | 0.11 mg/l |

12.2. Persistence and degradability

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

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

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

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

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

12.3. Bioaccumulative potential

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

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

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N,N-dimethyldecylamine 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

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects




No additional information available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

| | |
|--|---|
| Regional waste regulation | : Dispose of in accordance with relevant local regulations. |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| European List of Waste (LoW, EC 2000/532) | : 20 01 29* - detergents containing dangerous substances |

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

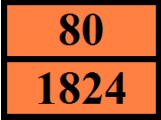
| ADR | IMDG | IATA |
|---|---|---|
| 14.1. UN number or ID number | | |
| UN 1824 | UN 1824 | UN 1824 |
| 14.2. UN proper shipping name | | |
| SODIUM HYDROXIDE SOLUTION | SODIUM HYDROXIDE SOLUTION | Sodium hydroxide solution |
| Transport document description | | |
| UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III, (E) | UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III | UN 1824 Sodium hydroxide solution, 8, III |
| 14.3. Transport hazard class(es) | | |
| 8 | 8 | 8 |
|  |  |  |
| 14.4. Packing group | | |
| III | III | III |
| 14.5. Environmental hazards | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-A EmS-No. (Spillage): S-B | Dangerous for the environment: No |
| No supplementary information available | | |

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14.6. Special precautions for user

Overland transport

| | |
|---|---|
| Classification code (ADR) | : C5 |
| Limited quantities (ADR) | : 5I |
| Excepted quantities (ADR) | : E1 |
| Packing instructions (ADR) | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (ADR) | : MP19 |
| Portable tank and bulk container instructions (ADR) | : T4 |
| Portable tank and bulk container special provisions (ADR) | : TP1 |
| Tank code (ADR) | : L4BN |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 3 |
| Special provisions for carriage - Packages (ADR) | : V12 |
| Hazard identification number (Kemler No.) | : 80 |
| Orange plates | :  |
| Tunnel restriction code (ADR) | : E |
| EAC code | : 2R |

Transport by sea

| | |
|---------------------------------|--------------|
| Special provisions (IMDG) | : 223 |
| Limited quantities (IMDG) | : 5 L |
| Excepted quantities (IMDG) | : E1 |
| Packing instructions (IMDG) | : P001, LP01 |
| IBC packing instructions (IMDG) | : IBC03 |
| Tank instructions (IMDG) | : T4 |
| Tank special provisions (IMDG) | : TP1 |
| Stowage category (IMDG) | : A |

Air transport

| | |
|--|------------|
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y841 |
| PCA limited quantity max net quantity (IATA) | : 1L |
| PCA packing instructions (IATA) | : 852 |
| PCA max net quantity (IATA) | : 5L |
| CAO packing instructions (IATA) | : 856 |
| CAO max net quantity (IATA) | : 60L |
| Special provisions (IATA) | : A3, A803 |
| ERG code (IATA) | : 8L |

14.7. Maritime transport in bulk according to IMO instruments

| | |
|----------|-------------------|
| IBC code | : Not applicable. |
|----------|-------------------|

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

| | |
|--|---|
| Other information, restriction and prohibition regulations | : Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 and all its amendments and modifications. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 and all its amendments and modifications. Detergent Regulation (EC 648/2004). |
|--|---|

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

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REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Detergent Regulation (EC 648/2004)

| Labelling of contents | |
|-----------------------|-----|
| Component | % |
| non-ionic surfactants | <5% |

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes | | |
|-----------------------|-----------------------|---------------------|
| Section | Changed item | Comments |
| 14 | ADR Regulatory status | correction of error |

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Detergent Regulation (EC 648/2004).

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| 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 |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |

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Full text of H- and EUH-statements:

| | |
|------|--|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

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

| | | |
|---------------|------|--------------------|
| Skin Corr. 1B | H314 | Calculation method |
| Eye Dam. 1 | H318 | Expert judgement |

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.