

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

Compilation date: 21/01/2026

Version:

5*

1. Identification of the Substance/Preparation and of the Company/Undertaking

1.1. Product identifier

Product form: Mixture
Trade name: Machine Dishwash Detergent
Product group: Trade product
Product code: **DT161**

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
Function or use category: Washing and cleaning products (including solvent based products).

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company Name: Mangrove Professional
PO Box 3348
Stafford
ST16 9NW

Tel: 01785 253702

1.4. Emergency Telephone Number

National Poisons Information Service
0344 892 0111
Only for healthcare professionals.

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Skin Corr. 1A, Eye Dam. 1: H314

2.2 Label Elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] and, Labelling according to Regulation (EC) No. 1272/2008 [CLP] and, as amended by GB-CLP Regulation, UK SI 2019/720

Hazard Pictograms (CLP)



Signal word (CLP): Danger.
Hazard statements (CLP): H314 Causes severe skin burns and eye damage.

Precautionary statements (CLP): P102 Keep out of reach of children.
P260 Do not breathe mist.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.

The full texts for all H- and EUH-phrases are displayed in Section 16 'Other Information'.

2.3 Other Hazards

See also section 10

No presence of PBT and vPvB ingredients.

3. Composition/information on ingredients:

Common Name	CAS No./ EC No.	Classification According to (EC) 1272/2008 (CLP)	Conc (%)
SODIUM HYDROXIDE	1310-73-2 215-185-5	Met. Corr. 1, H290 Skin Corr. 1A, H314	1 - 10
<i>REACH REG No: 01-2119457892-27-XXXX</i>			
GLUTAMIC ACID, N,N-DIACETIC ACID, TETRASODIUM SALT	51981-21-6 257-573-7	Met. Corr. 1, H290	1 - 10
<i>REACH Reg No: 01-2119493601-38-XXXX</i>			

The full texts for all H- and EUH-phrases are displayed in Section 16 'Other Information'.

4. First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation:	IF INHALED: Unlikely route of exposure as the product does not contain volatile substances. If spray/mist has been inhaled, move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
First-aid measures after skin contact:	IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention immediately.
First-aid measures after eye contact:	IF IN EYES: Rinse cautiously with water for at least 10 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist immediately if the symptoms persist. When dealing with caustic substances, notify emergency physician immediately (key words: burn in the eye). Immediately call a doctor.
First-aid measures after ingestion:	IF SWALLOWED: rinse mouth. Drink plenty of water. Do NOT induce vomiting. Immediately call a doctor.

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

Symptoms/injuries after inhalation:	Irritation of nose, throat and airway.
Symptoms/injuries after skin contact:	Burning pain and severe corrosive skin damage. May cause serious chemical burns to the skin.
Symptoms/injuries after eye contact:	Severe irritation, burning and tearing. Prolonged contact causes serious eye and tissue damage.
Symptoms/injuries after ingestion:	May cause chemical burns in mouth and throat.

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

Treat symptomatically.

5. Fire fighting measures

Extinguishing media: The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Special hazards: Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours.

Special protective equipment: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions:

Product causes chemical burns. Wear personal protection, see Section 8

Evacuate personnel to safe areas. Keep out unprotected personnel. Keep unauthorised personnel away

Environmental precautions:

Observe regulations on prevention of water pollution. Dam with sand or earth or appropriate bunding.

Do not permit to enter into surface water, stretches of water or soil undiluted.

Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and clean-up:

Small Spillages: Flush away spillage with plenty of water. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.

Additional advice:

See Section 8.

7. Handling and storage

Precautions for safe handling:

Handle in accordance with good industrial hygiene and safety practices.

Wear protective clothing, gloves, eye and face protection. For personal protection see section 8.

Storage precautions:

Keep only in the original container in a cool, well-ventilated place. Store away from the following materials: Oxidising materials.

Advice on common storage

Do not store together with: oxidising substances

Do not store together with: acidic substances

8. Exposure controls / personal protection

8.1. Control parameters

SODIUM HYDROXIDE

Workplace exposure limits:

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit

DNEL/DMEL (Workers)

Long-term - local effects, inhalation 1.5 mg/m³

DNEL/DMEL (General population)

Acute - local effects, inhalation 2.5 mg/m³

PNEC values

Freshwater

Value 2.2 mg/l

Marine water

Value 0.22 mg/l

STP

Value 43 mg/l

Soil

Value 0.72 mg/ kg

Ingredients Comments: No exposure limits noted for ingredients.

8.2. Exposure controls

Engineering measures: It is advisable to provide for installation of emergency shower and eye bath. Provide adequate ventilation.

Respiratory protection: If workplace exposure limit is exceeded apply Respiratory protective equipment.

Hand protection: Wear suitable gloves. PVC or rubber gloves are recommended.

Eye protection: Wear approved safety goggles or face shield.

Skin protection: Wear protective clothing, against splashing and contamination.

Hygiene Measures: Do not inhale vapour, aerosols, mist. Avoid contact with skin, eyes and clothing. Ensure there is good room ventilation. No eating, drinking, smoking or snuffing tobacco at work. Wash face and/or hands before breaks and end of work. Use preventative skin protection. Avoid contaminating clothes with product. Immediately change moistened and saturated work clothing. Any contaminated protective equipment to be cleaned after use.

Protective Measures: Handle in accordance with good industrial hygiene and safety practices. Wear suitable protective clothing, gloves and eye/face protection.

9. Physical and chemical properties

Appearance

Liquid.

Colour

Colourless to pale straw.

Odour	Not defined
pH	pH (diluted solution): 11.60 @ 3ml / Litre
Melting point	Data not available
Initial boiling point and range	102°C @ 760 mm Hg
Flash point	Boils without flashing.
Relative density	1.197 @ 20°C
Solubility	Soluble in water.

9.2 Further information

Miscibility in water:	Completely miscible
Other information:	Corrosive, alkaline agent

10. Stability and reactivity

10.1 Reactivity

Reactions with the following materials may generate heat: Strong acids and Oxidising agents.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

See Sections 10.1, 10.2 and 10.5

10.4 Conditions to avoid

Strong Heat.

10.5 Incompatible materials

Strong acids and Oxidising agents. Aluminium, Tin, Zinc and their alloys. Do not mix with other cleaning products unless advised to do so by a professional from the industry.

10.6 Hazardous decomposition products

Decomposition products under conditions of thermal decomposition: unknown

11. Toxicological information

11.1 Information on toxicological effects

Acute Oral Toxicity:

May cause burns in mucous membranes, throat, oesophagus and stomach. Causes burns.

Acute Inhalation Toxicity:

Vapours may irritate throat and respiratory system and cause coughing.

Acute Dermal Toxicity:

Irritating/ damaging to skin

Skin Corrosion/Irritation:

May cause serious chemical burns of the skin. Corrosive. Prolonged contact causes serious tissue damage.

Serious eye damage/eye irritation:

Causes burns. Risk of corneal damage. Visual disturbances including blurred vision.

Sensitisation:

Not known to be sensitising.

Repeated Dose Toxicity:

Not data available.

Assessment of STOT single exposure: No data available

Assessment of STOT repeated exposure: No data available

Risk of Aspiration Toxicity: No data available

12. Ecological information

12.1 Persistence and degradability

Ecological hazards relating to alkalinity of the product

Bio accumulative potential:

Bioaccumulation: none.

12.2 Ecotoxicity effects

Toxicity to fish:

Not considered to be toxic to fish

12.3 Results of PBT and vPvB assessment:

Not a PBT, vPvB substance as per the criteria of the REACH Ordinance.

Further information on ecology:

AOX: The product does not contain any organically bonded halogen.

Ecotoxicity Assessment:

Acute Aquatic toxicity: The classification criteria are not met based on the available data. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. Disposal considerations

13.1 Waste treatment methods

Product: Disposal in accordance to local authority regulations. In the case of recycling/disposal contact the relevant authorities. Offer surplus and non-recyclable solutions to a licensed disposal company.

With small amounts: May be disposed of as sewage water in accordance with local regulations by previously diluting with plenty of water.

Uncleaned Packaging: Rinse empty containers before disposal; recommended cleaning agent; water.

Offer rinsed packaging material to local recycling facilities. Do not use empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. Dispose of containers that have not been emptied completely and/or cleaned, in the same manner as the substance.

14. Transport information

Land Transport ADR/RID/GGVSEB (Germany)



ADR/RID – Labels

Class

Corrosive, 8

8

UN No.

1824

Packaging group

II

Tunnel Restriction Code (ADR)

(E)

Description of the goods (technical name)

Sodium Hydroxide Solution

Sea Transport IMDG-Code/GGVSee (Germany)



Class

8

Subsidiary risk

UN No.

1824

EmS

F-A, S-B

Packaging group

II

Proper technical name (proper shipping name) Sodium Hydroxide, Aqueous Solution

15. Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions. Contains no substance on the REACH candidate list

Where applicable, the surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. Other information

Usage and handling instructions are not mentioned on this Material Safety Data Sheet. The labelling of the product is indicated in Section 2.2.

The full text of the EUH-phrases indicated in this safety data sheet are as follows:

H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.

The information given has been compiled with reference to the Chemicals (Hazard Information & Packaging For Supply) Regulations (CHIP4) 2009 as amended, the Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH) Regulations, as amended, the Control of Substances Hazardous to Health Regulations (COSHH) 2002, as amended, and 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. This information also harmonises the provisions and criteria for the classification and labelling of substances, mixtures and certain specific articles within the Community, taking into account the classification criteria and labelling rules of the GHS.

* Version History - Reason for Revision:

1. Add Classification According to (EC) 1272/2008 (CLP)
2. Remove Classification According to Directive 67/548/EEC or 1999/45/EC.
3. Update Reach Registration Nos. in section 3.
4. Update UK REACH Regulations. Update GB-CLP Regulation. Update UK SI. Formula change section 3.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.