

Product MACHINE DISHWASH DETERGENT
 Revision date 14 September 2018
 Revision 1



Safety Data Sheet (SDS)

Section 1: Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

Product name MACHINE DISHWASH DETERGENT
Product no. 308 plus
Synonyms, Trade names No information available.

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

Identified uses Cleaning agent.
Uses advised against Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier T T Commercial Trading Ltd
 High Street South
 Dunstable
 Bedfordshire
 LU6 3SH
 United Kingdom
 Tel: 01582 865 050

Contact person

1.4 Emergency telephone number

Emergency telephone 01582 865 050

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)
 Physical and chemical hazards Not classified
 Human health Skin Corr. 1A - H314, Eye Dam. 1 - H318
 Environment Not classified

2.2 Label elements

Contains sodium hydroxide caustic soda
 sodium hydroxide
 potassium hydroxide

Label in accordance with (EC) no. 1272/2008



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

Precautionary statements

Prevention

P260 Do not breathe dust/fume/ gas/mist/vapours/spray.
 P280 Wear protective gloves/ protective clothing/eye protection/face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/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.
 P310 Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
sodium hydroxide caustic soda	CAS-No.: 1310-73-2 EC No.: 215-185-5	Skin Corr. 1A - H314	10-30%
pentasodium hydrogen C,C',C''-nitrilotris(methylphosphonate)	CAS-No.: 2235-43-0 EC No.: 218-791-8	Eye Irrit.2A - H319	1-10%
tetrasodium (1-hydroxyethylidene)bisphosphonate	CAS-No.: 3794-83-0 EC No.: 223-267-7	Acute Tox 4 - H302, Eye Irrit.2A - H319	1-10%
[nitrilotris(methylene)]trisphosphonic acid, potassium salt	CAS-No.: 27794-93-0 EC No.: 248-660-0	Eye Irrit.2A - H319, Me. Corr 1 - H290	1-10%
heptasodium trihydrogen [[bis[2-[bis(phosphonatomethyl)amino]ethyl]amino]methyl]phosphonate	CAS-No.: 68155-78-2 EC No.: 268-990-9	Eye Irrit.2A - H319	1-10%
sodium hydroxide	CAS-No.: 1310-73-2 EC No.: 215-185-5	Skin Corr. 1A - H314, Eye Dam. 1 - H318, Me. Corr 1 - H290	0-1%
potassium hydroxide	CAS-No.: 1310-58-3 EC No.: 215-181-3	Acute Tox 4 - H302, Skin Corr. 1A - H314, Me. Corr 1 - H290	0-1%

The full text for all hazard statements are displayed in section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.

Section 4: First aid measures

4.1 Description of first aid measures

General information

Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue.

Inhalation

Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion

If this product is ingested, remove victim immediately from source of exposure. Rinse mouth thoroughly. Do not induce vomiting. Provide fresh air, warmth and rest. Get medical attention. Never give anything by mouth to an unconscious person.

Skin contact

Remove victim immediately from source of exposure. Remove contaminated clothing, shoes and jewelry and wash before reuse. Wash the skin immediately with water. Obtain medical attention if irritation persists or if blistering occurs.

Eye contact

Do not rub eye. If this product contacts the eyes, gently flush eyes with water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove contact lenses if present and easy to do so. Avoid contaminating unaffected eye. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation

Inhalation of mist or vapor may cause respiratory tract irritation.

Ingestion

May cause chemical burns in mouth and throat. May cause severe internal injury.

Skin contact

Corrosive. Cause severe skin burns.

Eye contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Corrosive to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.
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Section 5: Fire-fighting measures**5.1 Extinguishing media**

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None noted.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	When heated, toxic and corrosive vapours/gases may be formed. During fire, toxic gases (CO, CO ₂) are formed.
Unusual fire & explosion hazards	Flammable hydrogen can form when the product contacts metals.
Specific hazards	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO ₂).

5.3 Advice for firefighters

Special fire fighting procedures	If possible, fight fire from protected position. Avoid breathing fire vapours. Ventilate closed spaces before entering them. Containers close to fire should be removed immediately or cooled with water if safe to do so.
Protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Eliminate all sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. In case of inadequate ventilation, use respiratory protection. Do not touch or walk through spilled material. If necessary evacuate surrounding areas.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Do not discharge onto the ground or into water courses.
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6.3 Methods and material for containment and cleaning up

Spill clean up methods	Stop leak if possible without risk. Ventilate and evacuate the area. Eliminate all ignition sources. DO NOT touch spilled material! When dealing with a spillage, wear necessary protective equipment. Absorb spillage with non-combustible, inert absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Wash thoroughly after dealing with a spillage.
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6.4 Reference to other sections

Reference to other sections	See section 1 for emergency contact. For personal protection, see section 8. For waste disposal, see section 13.
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Section 7: Handling and storage**7.1 Precautions for safe handling**

Handling	Read and follow manufacturer's recommendations. Use proper personal protection when handling (refer to Section 8). Do not handle broken packages without protective equipment. Do not use contact lenses. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Wash thoroughly after handling.
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7.2 Conditions for safe storage, including any incompatibilities

Storage precautions	Keep upright, locked up and out of reach of children. Keep the product in its original container. Store in cool dry areas away from direct sunlight or sources of ignition. Store separate from other products which react with acids and strong oxidising agents.
Storage class	Corrosive storage.

7.3 Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
Usage description	Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection**8.1 Control parameters**

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
sodium hydroxide caustic soda	OEL				2 mg/m ³	
sodium hydroxide caustic soda	WEL				2 mg/m ³	
potassium hydroxide	OEL				2 mg/m ³	
potassium hydroxide	WEL				2 mg/m ³	

Ingredient comments	WEL - Workplace Exposure Limits - EH40/2005 Workplace exposure limits. Ireland, Occupational Exposure Limits 2018.
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8.2 Exposure Controls**Protective equipment**

Engineering measures	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
Respiratory equipment	If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/145/143/149. The specific respirator selected must be based on contamination levels found in the work place. Where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN143 should be used, and suitable respirator cartridges as a backup to engineering controls. Consult manufacturer for specific advice.
Hand protection	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. (EU Directive 89/686/EEC). Gloves must be inspected prior to use. Suggested material: Butyl rubber - Layer thickness: 0.11 mm, Breakthrough time: >480 min. Consult manufacturer for specific advice. Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Eye protection	Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).
Other protection	The selected clothing must satisfy the European norm standard EN 943. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Hygiene measures	Observe normal hygiene standards. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Wash hands after use.
Process conditions	Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Non-viscous liquid.
Colour	Pale, straw colour.
Odour	No information available.
Odour threshold - lower	No information available.
Odour threshold - upper	No information available.
pH-Value, Conc. Solution	>13.5.
pH-Value, Diluted solution	No information available.
Melting point	No information available.
Initial boiling point and boiling range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability state	No information available.
Flammability limit - lower(%)	No information available.
Flammability limit - upper(%)	No information available.
Vapour pressure	No information available.
Vapour density (air=1)	No information available.
Relative density	1.12g/cm ³ @ 20.00 °C
Bulk density	No information available.
Solubility	Soluble in water.
Decomposition temperature	No information available.
Partition coefficient; n-Octanol/Water	No information available.
Auto ignition temperature (°C)	No information available.
Viscosity	No information available.
Explosive properties	Not classified as explosive.
Oxidising properties	No information available.

9.2 Other information

Molecular weight	No information available.
Volatile organic compound	No information available.
Other information	None noted.

Section 10: Stability and reactivity**10.1 Reactivity**

Reactivity	Reaction with: Acids oxidising agents. Reactive with metals.
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10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3 Possibility of hazardous reactions

Hazardous reactions	For information on hazardous reactions see section 10.1. Attacks metals liberating flammable Hydrogen gas.
Hazardous polymerisation	Will not polymerise.
Polymerisation description	Not applicable.

10.4 Conditions to Avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Avoid extreme temperatures and storing in large quantities and for long periods of time.
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10.5 Incompatible materials

Materials to avoid	Do not mix with other chemicals unless listed on directions. Keep away from acids and oxidants. Corrosive to metals.
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10.6 Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other harmful gases or vapors.
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Section 11: Toxicological information**11.1 Information on toxicological effects**

Toxicological information	No toxicological information for the overall finished product.
Acute toxicity (Oral LD50)	SODIUM HYDROXIDE: (CAS 1310-73-2) 325 mg/kg bw Rabbit.
Acute toxicity (Dermal LD50)	SODIUM HYDROXIDE: (CAS 1310-73-2) 1350 mg/kg Rabbit.
Acute toxicity (Inhalation LD50)	No information available.
Serious eye damage/irritation	Causes serious eye damage.
Skin corrosion/irritation	No information available.
Respiratory sensitisation	No information available.
Skin sensitisation	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Specific target organ toxicity - Single exposure:	
STOT - Single exposure	No information available.
Specific target organ toxicity - Repeated exposure:	
STOT - Repeated exposure	No information available.
Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion	May cause chemical burns in mouth and throat. May cause severe internal injury.
Skin contact	Corrosive. Cause severe skin burns.
Eye contact	Extreme irritation of eyes and mucous membranes, including burning and tearing. Corrosive to eyes.
Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Routes of entry	No information available.
Target organs	Eyes, skin, digestive system, respiratory system.
Aspiration hazards:	No information available.
Reproductive toxicity:	No information available.

Section 12: Ecological information**12.1 Toxicity**

Acute toxicity - Fish	SODIUM HYDROXIDE (CAS: 1310-73-2) LC50 96 hours 45.4 mg/l Onchorhynchus mykiss (Rainbow trout).
Acute toxicity - Aquatic invertebrates	SODIUM HYDROXIDE (CAS: 1310-73-2) EC50 48 hours 40.4 ug/L Ceriodaphnia sp.
Acute toxicity - Aquatic plants	No information available.
Acute toxicity - Microorganisms	No information available.
Chronic toxicity - Fish	No information available.
Chronic toxicity - Aquatic invertebrates	No information available.
Chronic toxicity - Aquatic plants	No information available.
Chronic toxicity - Microorganisms	No information available.
Ecotoxicity	The product is 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. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
Eco toxicological information	No ecological toxicity available on the overall finished product.

12.2 Persistence and degradability

Degradability	No information available.
Biological oxygen demand	No information available.
Chemical oxygen demand	No information available.

12.3 Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Bioaccumulation factor	No information available.
Partition coefficient; n-Octanol/Water	No information available.

12.4 Mobility in soil

Mobility	The product is soluble in water.
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12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Product is not identified as PBT or vPvB.
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12.6 Other adverse effects

Other adverse effects	No information available.
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Section 13: Disposal considerations

Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
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13.1 Waste treatment methods

Disposal methods	Dispose of waste and residues in accordance with local authority requirements.
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Section 14: Transport information**14.1 UN number**

UN no. (ADR)	UN1824
UN no. (IMDG)	UN1824
UN no. (IATA)	UN1824

14.2 UN proper shipping name

ADR proper shipping name	SODIUM HYDROXIDE SOLUTION
IMDG proper shipping name	SODIUM HYDROXIDE SOLUTION
IATA proper shipping name	SODIUM HYDROXIDE SOLUTION

14.3 Transport hazard class(es)

ADR class	8
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IMDG class	8
IATA class	8

Transport labels



14.4 Packing group

ADR/RID/ADN packing group	II
IMDG packing group	II
IATA packing group	II

14.5 Environmental hazards

ADR	No
IMDG	No
IATA	No

14.6 Special precautions for user

EMS	F-A, S-B
Emergency action code	A3 A803
Hazard no. (ADR)	80
Tunnel restriction code	(E)

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information

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

EU legislation	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 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
Approved code of practice	Workplace Exposure Limits Guidance Note EH40/2005. 2018 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.
Revision comments	This is a first issue.
Revision date	14 September 2018
Revision	1
Safety data sheet status	Approved.

Hazard statements in full

H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H302	Harmful if swallowed.
H290	May be corrosive to metals.
H318	Causes serious eye damage.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any

other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.