



SAFETY DATA SHEET

HARD WATER MACHINE WARE WASH

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name HARD WATER MACHINE WARE WASH
Internal Id C862

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

Identified uses Detergent.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
EMERGENCY: +44 (0) 777 8505 330
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

+44 (0) 777 8505 330

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Met. Corr. 1 - H290
Human health Skin Corr. 1A - H314
Environment Not classified.

Classification (1999/45/EEC)

C;R35.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Contains SODIUM HYDROXIDE

Detergent Labelling:

5 - < 15% Phosphonates
< 5% EDTA and salts thereof
amphoteric surfactants

Label In Accordance With (EC) No. 1272/2008

HARD WATER MACHINE WARE WASH



Signal Word	Danger	
Hazard Statements	H290	May be corrosive to metals.
	H314	Causes severe skin burns and eye damage.
Precautionary Statements	P234	Keep only in original container.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P309+311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
	P501	Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

TETRASODIUM 1-HYDROXYETHYLIDENE-1,1-DIPHOSPHONATE	10-30%
CAS-No.: 3994-83-0	EC No.: 223-267-7
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.
SODIUM HYDROXIDE	5-10%
CAS-No.: 1310-73-2	EC No.: 215-185-5
	Registration Number: 01-2119457892-27
Classification (EC 1272/2008) Met. Corr. 1 - H290 Skin Corr. 1A - H314	Classification (67/548/EEC) C;R35
TETRASODIUM GLUTAMATE	1-5%
CAS-No.: 51981-21-6	EC No.: 257-573-7
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.
TETRASODIUM EDTA	1-5%
CAS-No.: 64-02-8	EC No.: 200-573-9
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318	Classification (67/548/EEC) Xn;R22. Xi;R41.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move into fresh air and keep at rest.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting. Get medical attention.

Skin contact

Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention promptly if symptoms occur after washing.

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

General information

Seek medical attention for all burns, regardless how minor they may seem.

Inhalation

Upper respiratory irritation.

Ingestion

May cause chemical burns in mouth and throat. May cause discomfort if swallowed.

Skin contact

Burning pain and severe corrosive skin damage.

Eye contact

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

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Fire or high temperatures create: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use protective gloves, goggles and suitable protective clothing.

6.2. Environmental precautions

Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

Absorb with inert, damp, non-combustible material, then flush area with water.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container at temperatures between 0°C and 40°C.

Storage Class

Corrosive storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
SODIUM HYDROXIDE	WEL		2 mg/m ³	

WEL = Workplace Exposure Limit.

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL

Industry

Inhalation.

Long Term

Local Effects

1.0 mg/m³

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation.

Hand protection

Protective gloves must be used if there is a risk of direct contact or splash. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC.

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Hygiene measures

Wash promptly if skin becomes contaminated. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Straw.
Odour	Mild.
Relative density	1.17 @ 20°C
pH-Value, Conc. Solution	>13.0

9.2. Other information

Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Exothermic reaction with: Acids.

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10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

The solution is strongly alkaline and reacts with strong acids with heat generation.

10.5. Incompatible materials

Materials To Avoid

Strong acids.

10.6. Hazardous decomposition products

Fire or high temperatures create: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Upper respiratory irritation.

Ingestion

Causes severe burns.

Skin contact

Causes severe burns.

Eye contact

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

Toxicological information on ingredients.

SODIUM HYDROXIDE (CAS: 1310-73-2)

Acute toxicity:

Acute Toxicity (Oral LD50)

2000 mg/kg Rat

TETRASODIUM EDTA (CAS: 64-02-8)

Acute toxicity:

Acute Toxicity (Oral LD50)

3030 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 5000 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

4.14 mg/l (dust/mist) Rat 4 hours

TETRASODIUM GLUTAMATE (CAS: 51981-21-6)

Toxic Dose 1 - LD 50

>2000 mg/kg (oral rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Acute Toxicity - Fish

Not determined.

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Ecological information on ingredients.

SODIUM HYDROXIDE (CAS: 1310-73-2)

Acute Toxicity - Fish

LC50 48 hours ~ 145 mg/l *Poecilia reticulata* (Guppy)

REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours ~ 76 mg/l *Daphnia magna*

REACH dossier information

TETRASODIUM EDTA (CAS: 64-02-8)

LC 50, 96 Hrs, Fish mg/l

>100

TETRASODIUM GLUTAMATE (CAS: 51981-21-6)

Acute Toxicity - Fish

LC50 96 hours > 100 mg/l *Onchorhynchus mykiss* (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 100 mg/l *Daphnia magna*

12.2. Persistence and degradability

Degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) 1760

UN No. (IMDG) 1760

UN No. (ICAO) 1760

14.2. UN proper shipping name

Proper Shipping Name CORROSIVE LIQUID, N.O.S. (sodium hydroxide)

14.3. Transport hazard class(es)

ADR/RID/ADN Class 8

ADR/RID/ADN Class Class 8: Corrosive substances.

IMDG Class 8

ICAO Class/Division 8

Transport Labels

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14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

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

Uk Regulatory References

Chemicals (Hazard Information & Packaging) Regulations.

Statutory Instruments

Control of Substances Hazardous to Health.

Guidance Notes

Workplace Exposure Limits EH40.

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.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material.

Revision Date 25/10/2013

Revision 1.1

Supersedes date 19/04/2012

Risk Phrases In Full

R35	Causes severe burns.
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R41	Risk of serious damage to eyes.

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Hazard Statements In Full

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

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.