



**SAFETY DATA SHEET**  
according to Regulation (EU) 2015/830

**PHS Machine Detergent**

Revision: 1  
Revision date: 07/05/2020

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

**1.1 Product identifier**

**Product name** PHS Machine Detergent

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

**Product Use** [SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC35] Washing and cleaning products (including solvent based products);

**1.3 Details of the supplier of the safety data sheet**

**Company Address** Personnel Hygiene Services Ltd  
Block B, Western Industrial Estate, Caerphilly  
CF83 1XH  
United Kingdom  
**Web** [www.phsdirect.co.uk](http://www.phsdirect.co.uk)  
**Telephone** 02920 809098  
**Email:** [www.phsdirect.co.uk/contact-us](http://www.phsdirect.co.uk/contact-us)

**1.4 Emergency telephone number**

**Emergency telephone number** 02920 809098  
Ireland: National Poisons Centre, Beaumont Hospital, Dublin 9  
Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)  
Tel: 01 809 2566 (health care professionals)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**2.1.2 Classification - EC 1272/2008** Skin Corr. 1A: H314;

**2.2 Label elements**

**Hazard pictograms**



**Signal Word**

Danger

**Hazard Statement**

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.

**Precautionary Statement: Prevention**

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary Statement: Response**

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.  
P310 - Immediately call a POISON CENTER/doctor/ .  
P363 - Wash contaminated clothing before reuse.

**Precautionary Statement Storage**

P405 - Store locked up.

**Precautionary Statement: Disposal**

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

**Further information**

Contains: Sodium hydroxide.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures****EC 1272/2008**

Chemical name	Index No.	CAS No.	EC No.	REACH registration Number	Conc (%w/w)	Classification
Sodium hydroxide	011-002-00-6	1310-73-2	215-185-5	01-2119457892-27	10 - 20%	Skin Corr. 1A: H314;
Tetrasodium (1-hydroxyethylidene) bisphosphonate		3794-83-0	223-267-7	01-2119647955-23	1 - 10%	Skin Irrit. 2: H315; Eye Irrit. 2: H319;

**SECTION 4: First aid measures****4.1 Description of first aid measures**

<b>Inhalation</b>	Inhalation of vapour may cause shortness of breath. Move the exposed person to fresh air. Seek medical attention.
<b>Eye contact</b>	Causes burns. Causes severe inflammation and may damage the cornea. Wash with water. Seek medical attention.
<b>Skin contact</b>	Causes burns. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
<b>Ingestion</b>	Ingestion causes burns to the respiratory tract. DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

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

<b>Inhalation</b>	Irritant, Severe respiratory.
<b>Eye contact</b>	Causes severe burns.
<b>Skin contact</b>	Causes severe burns.
<b>Ingestion</b>	Causes severe burns.

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

	No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.
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**SECTION 5: Firefighting measures****5.1 Extinguishing media**

	Use as appropriate: Carbon dioxide (CO <sub>2</sub> ), Dry chemical, Foam.
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**5.2 Special hazards arising from the substance or mixture**

	Corrosive. Burning produces irritating, toxic and obnoxious fumes.
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**5.3 Advice for firefighters**

	Wear suitable respiratory equipment when necessary.
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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

	Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear suitable protective equipment.
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**6.2 Environmental precautions**

	Do not allow product to enter drains. Prevent further spillage if safe.
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**6.3 Methods and material for containment and cleaning up**

	Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.
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**6.4 Reference to other sections**

	For personal protective equipment see subsection 8.2. For disposal considerations see section 13.
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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best manual handling considerations when handling, carrying and dispensing.
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**7.2 Conditions for safe storage, including any incompatibilities**

	Keep in a cool, dry, well ventilated area. Keep containers tightly closed. For incompatibilities refer to section 10.4.
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**7.3 Specific end use(s)**

	No specific advice for end use available.
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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### 8.1.1 Exposure Limit Values - UK

Sodium hydroxide	WEL 8-hr limit ppm -	WEL 8-hr limit mg/m <sup>3</sup> -
	WEL 15 min limit ppm -	WEL 15 min limit mg/m <sup>3</sup> : 2
	WEL 8-hr limit mg/m <sup>3</sup> total inhalable dust: -	WEL 15 min limit mg/m <sup>3</sup> total inhalable dust: -
	WEL 8-hr limit mg/m <sup>3</sup> total respirable dust -	WEL 15 min limit mg/m <sup>3</sup> total respirable dust: -

#### 8.1.1 Occupational Exposure Limits Values (OELVs) - Ireland

Sodium hydroxide	Occupational Exposure Limit Value (8-hour reference period)	-
	Occupational Exposure Limit Value (15-minute reference period)	2 mg/m <sup>3</sup>

#### DNEL: Derived no-effect level.



##### Exposure Pattern - Workers

Sodium hydroxide	Acute dermal - Local effects	2 mg/m <sup>3</sup>
	Long-term - inhalation - Local effects	1 mg/m <sup>3</sup>

##### Exposure Pattern - General population

Sodium hydroxide	Acute dermal - Local effects	2 mg/m <sup>3</sup>
	Long-term - inhalation - Local effects	1 mg/m <sup>3</sup>

### 8.2 Exposure controls

<b>8.2.1 Appropriate engineering controls</b> <b>8.2.2 Individual protection measures</b> <b>Eye / face protection</b> <b>Skin protection -</b> <b>Hand protection</b> <b>Respiratory protection</b>	 
	Adopt best Manual Handling considerations when handling, carrying and dispensing. Take off immediately all contaminated clothing. Avoid contact with skin and eyes. Wash hands after handling the product.
	Ensure adequate ventilation of the working area.
	Wear chemical protective clothing.
	Safety glasses. (EN166)
	Chemical resistant gloves (PVC). (EN 374)
	Not normally required. Do not breathe gas/fumes/vapour/spray.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Liquid
<b>Colour</b>	Yellow
<b>Odour</b>	Characteristic
<b>pH</b>	>13
<b>Melting point</b>	Not determined
<b>Freezing Point</b>	Not determined
<b>Initial boiling point</b>	Not determined
<b>Flash point</b>	Not determined
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not applicable to liquids
<b>Fat Solubility</b>	Not determined
<b>Partition coefficient</b>	Not determined
<b>Autoignition temperature</b>	Not determined
<b>Viscosity</b>	<100 cp @20°C
<b>Explosive properties</b>	Not explosive
<b>Oxidising properties</b>	Not oxidising
<b>Solubility</b>	Soluble in water
<b>Vapour pressure</b>	Not determined

### 9.2 Other information

<b>Conductivity</b>	Not determined
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<b>Surface tension</b>	Not determined
<b>Specific gravity</b>	1.18 g/cm <sup>3</sup>

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	
	No reactivity hazards known under normal storage and use conditions.
<b>10.2 Chemical stability</b>	
	Stable under normal conditions.
<b>10.3 Possibility of hazardous reactions</b>	
	No other adverse effects known.
<b>10.4 Conditions to avoid</b>	
	Avoid contact with: Acids.

**SECTION 11: Toxicological information**

<b>11.1 Information on toxicological effects</b>	
<b>Skin corrosion/irritation</b>	Causes burns.
<b>Germ cell mutagenicity</b>	No mutagenic effects reported.
<b>Carcinogenicity</b>	No carcinogenic effects reported.
<b>Reproductive toxicity</b>	No observed effect level.

<b>11.1.4 Toxicological Information</b>			
<b>Sodium hydroxide</b>	Inhalation Rat LC50/15min:	NDA	Dermal Rat LD50: NDA
	Oral Rat LD50:	NDA	Oral Mouse LD50 NDA
	Dermal Rabbit LD50:	NDA	Dermal Guinea Pig LD50: NDA
<b>Tetrasodium (1-hydroxyethylidene) bisphosphonate</b>	Inhalation Rat LC50/15min:	NDA	Dermal Rat LD50: NDA
	Oral Rat LD50:	NDA	Oral Mouse LD50 NDA
	Dermal Rabbit LD50:	NDA	Dermal Guinea Pig LD50: NDA

**SECTION 12: Ecological information**

<b>12.1 Toxicity</b>	
<b>Sodium hydroxide</b>	Fish LC50/96h: 125 mg/l
	Daphnia LC50/24h: 76 mg/l
	Green Algae EC50/48h: 22mg/l (15min)
<b>Tetrasodium (1-hydroxyethylidene) bisphosphonate</b>	Algae EC50/72h: NDA
	Guppy LC50/96h: NDA
	Daphnia LC50/48h: NDA

<b>12.2 Persistence and degradability</b>	
	No data is available on this product.

<b>12.3 Bioaccumulative potential</b>	
	No data is available on this product.

<b>Partition coefficient</b>	
	No data is available on this product.

<b>12.4 Mobility in soil</b>	
	No data is available on this product.

<b>12.5 Results of PBT and vPvB assessment</b>	
	Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

<b>12.6 Other adverse effects</b>	
	No other adverse effects known.

**SECTION 13: Disposal considerations**

<b>General information</b>	
	Dispose of in compliance with all local and national regulations.

<b>Disposal of packaging</b>	
	Dispose of in compliance with all local and national regulations. Empty containers can be cleaned with water.

**Further information**

European Waste Catalogue: 20 01 15 alkalines.

**SECTION 14: Transport information****Hazard pictograms****14.1 UN number**

UN1824

**14.2 UN proper shipping name**

SODIUM HYDROXIDE, SOLUTION

**14.3 Transport hazard class(es)**

<b>ADR/RID</b>	8
<b>Subsidiary risk</b>	-
<b>IMDG</b>	8
<b>Subsidiary risk</b>	-
<b>IATA</b>	8
<b>Subsidiary risk</b>	-

**14.4 Packing group**

Packing group II

**14.5 Environmental hazards**

<b>Environmental hazards</b>	No
<b>Marine pollutant</b>	No

**ADR/RID**

<b>Hazard ID</b>	80
<b>Tunnel Category</b>	E

**IMDG**

EmS Code F-A-S-B

**IATA**

<b>Packing Instruction (Cargo)</b>	855
<b>Maximum quantity</b>	30L
<b>Packing Instruction (Passenger)</b>	851
<b>Maximum quantity</b>	1L

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU regulations:

- Regulation(EC)No.1907/2006 - REACH
- Regulation(EC)No1272/2008 - CLP
- Regulation(EC)No.648/2004 - Detergents regulation

Ingredients according to EC Detergents Regulation 648/2004  
Less than 5%: Phosphonates.

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out on the mixture.

**SECTION 16: Other information****Other information**

<b>Revision</b>	This document differs from the previous version in the following areas:
<b>Acronyms</b>	Changes to sections 1, 3, 8, 9, 11, 12, 15 LC: Lethal concentration. LD: Lethal dose. NDA - No data available. NOAEC: No observed adverse effect concentration. NOAEL: No observed adverse effect level. NOEC: No observed effect concentration. NOEL: No observed effect level. PBT: Persistent, bioaccumulative and toxic. SVHC. Substance of very high concern. vPvB. Very persistent and very bioaccumulative. *R01 - Polymer REACH number not available.
<b>Text of Hazard Statements in Section 3</b>	Skin Corr. 1A: H314 - Causes severe skin burns and eye damage. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Irrit. 2: H315 - Causes skin irritation.

	Eye Irrit. 2: H319 - Causes serious eye irritation.
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**Further information**

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.</p>
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