

Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Substance type:

BRAKES GLASSWASH DETERGENT CLP Mixture

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

Use of the Substance/Mixture : Detergent

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet:

COMPANY IDENTIFICATION

Brakes, Enterprise House Eureka Business Park Ashford, Kent, TN25 4AG TEL: 0845 6069090 LOCAL COMPANY IDENTIFICATION

For Product Safety information please contact: msdseame@nalco.com

1.4 Emergency telephone number:

Emergency telephone number	: 0345 606 9090 (Office hours 7.30hrs to 18.00 hrs Monday to)
	Friday) Trans-European	

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Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1	H290
Skin corrosion, Sub-category 1A	H314
Serious eye damage, Category 1	H318

2.2 Label elements

Labelling (REGULATION	(EC) No 1272/2008)
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Hazard pictograms	:		
Signal Word	:	Danger	
Hazard Statements	:	H290 H314	May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary Statements	:	Prevention: P280	Wear protective gloves/ eye protection/ face protection.
		Response: P303 + P361 + P3	•

	mediately all contaminated clothing. nse skin with water or shower.
	IF IN EYES: Rinse cautiously with
wa	ter for several minutes. Remove contact
ler	ses, if present and easy to do. Continue
	sing.
	mediately call a POISON
CE	NTER/doctor.

Hazardous components which must be listed on the label: Sodium Hydroxide

2.3 Other hazards

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration:
	EC-No.	(REGULATION (EC) No 1272/2008)	[%]
	REACH No.		
Sodium Hydroxide	1310-73-2	Skin corrosion Category 1A; H314	5 - < 10
	215-185-5	Corrosive to metals Category 1; H290	
	01-2119457892-27		
HEDP.Na4	29329-71-3	Acute toxicity Category 4; H302	1 - < 2.5
		Eye irritation Category 2; H319	
	01-2119510382-52		

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled	 Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
In case of skin contact	 Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
In case of eye contact	 Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
If swallowed	 Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, give 2 glasses of water.

Section: 5. FIREFIGHTING MEASURES

Get medical attention immediately.

Protection of first-aiders	: In event of emergency assess the danger before taking action.
	Do not put yourself at risk of injury. If in doubt, contact
	emergency responders. Use personal protective equipment as
	required.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

51	Extinguishing media		
5.1	Suitable extinguishing media		Use extinguishing measures that are appropriate to local
	Suitable extinguishing media	•	circumstances and the surrounding environment.
5.2	Special hazards arising from the	he	substance or mixture
	Specific hazards during firefighting	:	Not flammable or combustible.
	Hazardous combustion products	:	Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Oxides of phosphorus
5.3	Advice for firefighters		
	Special protective equipment for firefighters	:	Use personal protective equipment.
	Further information	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Advice for emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

6.2 Environmental precautions

Environmental precautions	Do not allow contact with soil, surfa	ace or ground water.
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6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	 Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.
	material to ensure runoil does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information. For personal protection see section 8. See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling	: Do not ingest. Do not breathe spray, vapour. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re- use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.
7.2 Conditions for safe storage,	including any incompatibilities
Requirements for storage areas and containers	: Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
	Keep only in original packaging. Absorb spillage to prevent material damage.
Suitable material	: Keep in properly labelled containers., Plastic material
Unsuitable material	: Aluminium, Mild steel
7.3 Specific end uses	
Specific use(s)	: Detergent

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Sodium Hydroxide	1310-73-2	STEL	2 mg/m3	UKCOSSTD

DNEL		
Sodium Hydroxide	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1 mg/m3
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1 mg/m3

8.2 Exposure controls

Appropriate engineering controls

Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Individual protection measures

Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.Remove and wash contaminated clothing before re- use.Wash face, hands and any exposed skin thoroughly after handling.Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.
Eye/face protection (EN 166)	:	Safety goggles Face-shield
Hand protection (EN 374)	:	Recommended preventive skin protection Gloves Nitrile rubber butyl-rubber Breakthrough time: 1 – 4 hours Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 mm or equivalent (please refer to the gloves manufacturer/distributor for advise). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin and body protection (EN 14605)	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing including appropriate safety shoes
Respiratory protection (EN 143, 14387)	:	When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:A-P
Environmental exposure cor	ntro	bls
General advice	:	Consider the provision of containment around storage

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

vessels.

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	clear, pale, Straw-colored
Odour	:	no data available
Flash point	:	> 100 °C
рН	:	13 - 14, 100 % (20 °C)
Odour Threshold	:	no data available
Melting point/freezing point	:	no data available
Initial boiling point and boiling range	:	no data available
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	1.22 - 1.25
Solubility(ies)		
Water solubility	:	soluble in cold water, soluble in hot water
Solubility in other solvents	:	no data available
Partition coefficient: n- octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Explosive properties	:	no data available
Oxidizing properties	:	no data available

9.2 Other information

no data available

Section: 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	: No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid	
Conditions to avoid	: None known.
10.5 Incompatible materials	
Materials to avoid	: Strong acids
	Aluminium Mild steel
10.6 Hazardous decomposition pro	oducts
Hazardous decomposition products	 Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of	:	Inhalation, Eye contact, Skin contact
exposure		

Toxicity

Product

Acute oral toxicity	: Acute toxicity estimate : > 2,000 mg/kg
Acute inhalation toxicity	: There is no data available for this product.
Acute dermal toxicity	: There is no data available for this product.
Skin corrosion/irritation	: There is no data available for this product.
Serious eye damage/eye irritation	: There is no data available for this product.
Respiratory or skin sensitization	: There is no data available for this product.
Carcinogenicity	: There is no data available for this product.
Reproductive effects	: There is no data available for this product.
Germ cell mutagenicity	: There is no data available for this product.
Teratogenicity	: There is no data available for this product.
STOT - single exposure	: There is no data available for this product.
STOT - repeated exposure	: There is no data available for this product.
Aspiration toxicity	: There is no data available for this product.
Components	

Components

Acute oral toxicity	:	HEDP.Na4 LD50 rat: 1,166 mg/kg
Components		
Acute dermal toxicity	:	HEDP.Na4 LD50 rabbit: > 7,940 mg/kg
Potential Health Effects		
Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Causes digestive tract burns.
Inhalation	:	May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.
Experience with human exposure		
Eye contact	:	Redness, Pain, Corrosion
Skin contact	:	Redness, Pain, Corrosion
Ingestion	:	Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough
Further information	:	no data available

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Product	
Environmental Effects	: This product has no known ecotoxicological effects.
Toxicity to fish	: no data available
Toxicity to daphnia and other aquatic invertebrates	: no data available
Toxicity to algae	: no data available
Components	
Toxicity to fish	: HEDP.Na4 96 h LC50: > 1,925 mg/l
Components	
Toxicity to daphnia and other aquatic invertebrates	: Sodium Hydroxide 48 h EC50: 40 mg/l
	HEDP.Na4 48 h EC50: 3,200 mg/l

Components

Componente	
Toxicity to algae	: HEDP.Na4 14 d NOEC: 13 mg/l
Components	
Toxicity to fish (Chronic toxicity)	: HEDP.Na4 14 d LC50: 180 mg/l
Components	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	
12.2 Persistence and degradability	
Product	
no data available	
Components	
Biodegradability	: Sodium Hydroxide Result: Not applicable - inorganic
	HEDP.Na4 Result: Poorly biodegradable
12.3 Bioaccumulative potential	
no data available	

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product

: Where possible recycling is preferred to disposal or

		incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Contaminated packaging	:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.
Guidance for Waste Code selection	:	Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)	
14.1 UN number:	UN 1824
14.2 UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es):	8
14.4 Packing group:	11
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.
Air transport (IATA)	
14.1 UN number:	UN 1824
14.2 UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es):	8
14.4 Packing group:	11
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.
Sea transport (IMDG/IMO)	
14.1 UN number:	UN 1824
14.2 UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es):	8
14.4 Packing group:	II
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.
14.7 Transport in bulk according to	Not applicable.
Annex II of MARPOL 73/78 and the IBC	
Code:	

Section: 15. REGULATORY INFORMATION

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

INTERNATIONAL CHEMICAL CONTROL LAWS

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Corrosive to metals 1, H290	Calculation method
Skin corrosion 1A, H314	Calculation method
Serious eye damage 1, H318	Calculation method

Full text of H-Statements

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

Full text of other abbreviations

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number – European Community number; ECx – Concentration associated with x% response; ELx – Loading rate associated with x% response; EmS – Emergency Schedule; ENCS – Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population: LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose): MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative) Structure Activity Relationship; REACH – Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Safety Data Sheet	:	IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.
		The possible key literature references and data sources which may have been used in conjunction with the consideration of expert judgment to compile this Safety Data Sheet: European regulations/directives (including (EC) No. 1907/2006, (EC) No. 1272/2008), supplier data, inter-net, ESIS, IUCLID, ERIcards, Non European official regulatory data and other data sources.
Prepared By	:	Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.