

Brakes Hard Water Dishwasher Detergent - A16097 & A16098



Safety Data Sheet

Issue 2T

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

Revision 26 March 2015

1 Identification of the substance/mixture and of the company undertaking

1.1 Product Identifier	Product Name	Brakes Hard Water Dishwasher Detergent	
	Product Codes	A16097 & A16098	
1.2 Relevant identified uses of the substance or mixture and uses advised against			
Identified Uses of the substance/mixture	Dishwash product. Automatic process. Professional Use.		
Uses advised against	Uses other than those identified are not recommended		
1.3 Details of the supplier of the safety data sheet			
Manufacturer/Distributor	Brakes, Enterprise House, Eureka Business Park, Ashford, Kent, TN25 4AG	Tel. Fax. Web: email	0845 6069090 01233 635072 www.brake.co.uk customer.service@brake.co.uk
1.4 Emergency Telephone Number			
National Advisory Body/Poison Centre			
Tel.	National Poison Information Service 0870 243 2241 (UK Only) (0870 600 6266 Medical Professionals Only – UK Only)		
Manufacturer/ Distributor/ Importer			
Telephone number:	0845 6069090		

2 Hazards Identification

2.1 Classification of Substance or mixture

Product Definition	Mixture	
Classification according to Directive 1999/45/EC [DPD]		
Classification	C	Corrosive
Human Health Hazards	R35	Causes severe burns
Classification according to Regulation (EC) No. 1272/2008		
Physical Hazards	Met Corr 1 – H290	
Human Health Hazards	Skin Corr 1 – H314	
Environmental Hazards	No Significant Hazard	

Safety Data Sheet



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

Brakes Hard Water Dishwasher Detergent - A16097 & A16098

2.2 Label Elements

Label Elements (In Accordance With Directive 1999/45/EC [DPD])

Hazard Symbol(s)



Indication of danger

CORROSIVE

Risk Phrases

R35 Causes severe burns

Safety Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
 S28a After contact with skin, wash immediately with plenty of water.
 S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

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

Pictogram(s)



Signal Word

Danger

Contains sodium hydroxide and etidronic acid

Hazard Statements

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

Precautionary statements

Prevention

P280 Wear protective gloves, protective clothing, eye protection and face protection

Response

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
 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
 P390 Absorb spillage to avoid material damage

2.3 Other hazards

Other hazards which do not result in classification

Not applicable

Safety Data Sheet



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

Brakes Hard Water Dishwasher Detergent - A16097 & A16098

3 Composition/Information on Ingredients

3.2 Mixtures

Product/Ingredient Name	Identifiers Reach No/CAS/EC No	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Sodium Hydroxide	01-2119457892-27/ 1310-73-2/ 215-185-5	10-20	C; R35	Skin Corr 1A (H314)	1, 2
Trisodium nitrilotriacetate	01-2119519239-36/ 5064-31-3/ 225-768-6	1-5%	Xn; R22, R36, R40	Carc 2 (H351) Acute Tox. 4 (H302) Eye Irrit. 2 (H319)	1
1-Hydroxy Ethylidene-1,1 Diphosphonic Acid	01-2119510391-53/ 2809-21-4/ 220-552-8	1-5%	Xi; R41	Eye Dam. 1 (H318)	1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section

Type	1	Substance classified with a health or environmental hazard
	2	Substance with a workplace exposure limit
	3	Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
	4	Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

4 First aid measures

4.1 Description of first aid measures

Eye Contact	Get medical attention immediately. Rinse opened eye for at least 15 minutes with plenty of water. Check for and remove contact lenses. Any chemical burns must be treated promptly by a doctor
Inhalation	Remove from source of exposure. Supply fresh air. Get medical attention immediately
Skin Contact	Immediately wash thoroughly with plenty of water. Remove all contaminated clothing. Continue to rinse for 15 minutes. Apply sterile dressings if required. Consult a skin specialist in the event of irritation or burns.
Ingestion	Immediately rinse mouth and ask person to slowly sip 200-300 ml of water or milk. Stop if person shows signs of vomiting. Seek medical attention immediately. Do not induce vomiting.
Protection of First Aider	Wear PPE if appropriate (Refer to section 8.2)

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Severe burns and irritation are most likely symptoms when there is exposure to skin, eyes and respiratory system. Not considered to cause sensitization. Further important symptoms and effects are so far not known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment

Treat according to symptoms (decontamination, vital functions). Toxicological information on components, where available, is given in section 11.

Brakes Hard Water Dishwasher Detergent - A16097 & A16098

5 Fire fighting measures

5.1 Extinguishing media

Extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog
Unsuitable extinguishing media	None known

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	During fire toxic gases, CO and CO ₂ are formed

5.3 Advice for fire-fighters

Special precautions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear self-contained breathing apparatus and suitable personal protective equipment as appropriate to the surrounding fire.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray/mist. Avoid contact with the skin, eyes and clothing. Use personal protective clothing. Information regarding personal protective measures see, section 8.

6.2 Environmental precautions

Do not discharge into drains/surface waters/groundwater. Contain contaminated water/fire fighting water.

6.3 Methods and material for containment and cleaning up

Small spill:	Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.
Large spill	Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. dry sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7 Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed. Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid contact with the skin, eyes and clothing. Contaminated surfaces may be extremely slippery. Clean up spillages. Do not allow to dry. Do not eat, drink or smoke in area where material is used or stored.

7.2 Conditions for safe storage, including any incompatibilities

Protect against heat. Store in original labelled containers. Keep container tightly closed, upright and in a cool place. Keep away from acids. Protect from freezing.

7.3 Specific end use(s)

Recommendations	Not specific advice available.
Industrial sector specific solutions	Not applicable.

Brakes Hard Water Dishwasher Detergent - A16097 & A16098

8 Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name

Sodium hydroxide

Exposure limit values

EH40 (United Kingdom): STEL: 2mg/m³ (15 minutes)

Derived effect levels

No DNELs available for the mixture

Predicted effect concentrations

No PNECs available for the mixture.

8.2 Exposure controls

Process conditions

Provide eye-wash stations

Engineering Measures

The concentrated product is intended to be used via a dosing system to avoid splashes and contact with the skin. Wear appropriate PPE if contact is possible when connecting to dosing system. If airborne vapours or mists are generated provide adequate general and local exhaust ventilation to keep exposure below any statutory limits.

Personal Protective Equipment

Respiratory protection:

Not needed in normal use. If vapour/aerosol is created use particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 14387)

Hand protection

Wear chemical resistant protective gloves (EN 374)

Review condition of gloves when in use, especially for wear, cuts and breakthrough after prolonged contact.

Consult with a supplier of protective gloves for further information or for other tasks.

Eye protection

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Wear chemical resistant clothing and boots if exposure/splashing may occur. Other body protection may be suitable depending on activity and possible exposure, e.g. apron, chemical-protection suit (meeting EN 14605).

General safety and hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

9 Physical & chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Clear, pale straw.
Odour	Product specific.
Odour threshold	Not determined for the mixture.
pH value 20 Deg C	13 - 14 (at 100%)
Melting point/Freezing point	Not determined for the mixture.
Initial boiling point and boiling range	Not determined for the mixture.
Flash point	>100 deg C
Evaporation rate	Not determined for the mixture.
Flammability (solid, gas)	Not flammable.
Burning time	Not determined for the mixture.
Burning rate	Not determined for the mixture.
Upper/lower flammability or explosive limits	Not determined for the mixture.
Vapour pressure	Not determined for the mixture.
Relative density	1.22 – 1.25
Solubility(ies)	Readily soluble in cold and hot water
Partition coefficient: n-octanol/water	Not determined for the mixture.
Auto ignition temperature	Not determined for the mixture.
Decomposition temperature	Not determined for the mixture.
Viscosity	Not determined for the mixture.
Explosive properties	Not explosive
Oxidising properties	None

9.2 Other Information

No further relevant information available

Safety Data Sheet



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

Brakes Hard Water Dishwasher Detergent - A16097 & A16098

10 Stability and Reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical Stability	Stable mixture under normal conditions or storage and use.
10.3 Possibility of hazardous reactions	Hazardous reactions will not occur in normal storage conditions.
10.4 Conditions to avoid	None known in normal storage conditions.
10.5 Incompatible materials	Will react with acids.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicology

11.1 Information on toxicological effects

Toxicological data for this mixture is not available as animal toxicity studies have not been carried out. Toxicological data for the raw materials is, where provided by the manufacturer, available on request.

12 Ecological information

12.1 Toxicity

Ecological Toxicity data for this mixture is not available as ecological toxicity studies have not been carried out. Ecological Toxicity data for the raw materials is, where provided by the manufacturer, available on request.

12.2 Persistence and degradability

Conclusion/Summary Any surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC

12.3 Bioaccumulative potential

Conclusion/Summary Not determined for the mixture.

12.4 Mobility in soil

Soil/water partition coefficient (KOC) Not determined for the mixture.

Mobility Not determined for the mixture.

12.5 Results of PBT and vPvB assessment

PBT Not applicable.

vPvB Not applicable.

12.6 Other adverse effects No known significant effects or critical hazards.

13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.
EWC Code 20 01 29* - detergents containing dangerous substances

Empty packaging recommendation: Dispose of observing national or local regulations. (Can be cleaned with water)
EWC Code 20 01 39





Safety Data Sheet



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

Brakes Hard Water Dishwasher Detergent - A16097 & A16098

14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	UN 1824	UN 1824	UN 1824	UN 1824
14.2 UN proper shipping name	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es): 8				
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	None	None	None	None
14.6 Special precautions for user	None known	None known	None known	None known
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBCCode	Not Applicable			
Other relevant information (ADR)	Classification code: C5 Tunnel restriction code: E Hazard Identification No: 80			

15: Regulatory information

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

Ingredients according to EC Detergents Regulation 648/2004

<5% NTA (nitriiloacetic acid) and salts
 Phosphonates

15.2 Chemical safety assessment

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

16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

Reason for revision: Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

Full text of the R, H and EUH phrases mentioned in section 3

R35	Causes severe burns
R22	Harmful if swallowed
R36	Irritating to eyes
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
H314	Causes severe skin burns and eye damage
H351	Suspected of causing cancer
H302	Harmful if swallowed
H319	Causes serious eye irritation
H318	Causes serious eye damage

Abbreviations and acronyms

ATE	Acute Toxicity Estimate
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008]
DNEL	Derived No Effect Level
EUH statement	CLP-specific Hazard statement
N/A	Not applicable
PNEC	Predicted No Effect Concentration
REACH No	REACH registration number, without supplier specific part