

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

1.1 Product identifier:

Substance type:

BRAKES RINSE AID CLP Mixture

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

Use of the Substance/Mixture : RINSE AID

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)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

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.		
C12-C14 LINEAR ALCOHOL ETHYLENE	68439-51-0	Chronic aquatic toxicity Category 3; H412	2.5 - < 5
OXIDE/PROPYLENE OXIDE ADDUCT	POLYMER		
Isopropanol	67-63-0	Flammable liquids Category 2; H225	1 - < 2.5
	200-661-7	Eye irritation Category 2; H319	
	01-2119457558-25	Specific target organ toxicity - single	
		exposure Category 3; H336	
Dimethyl-Dioctyl-Ammonium	5538-94-3	Acute toxicity Category 3; H301	< 0.1
Chloride	226-901-0	Acute toxicity Category 2, H330	
		Acute toxicity Category 3; H311	
		Skin corrosion Sub-category 1B; H314	
		Serious eye damage Category 1; H318	
		Acute aquatic toxicity Category 1; H400	
		Chronic aquatic toxicity Category 1; H410	

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	: Get medical attention if symptoms occur.	
In case of skin contact	: Wash off with soap and plenty of water. Get medical attention if symptoms occur.	
In case of eye contact	: Rinse with plenty of water. Get medical attention if symptoms occur.	
If swallowed	: Rinse mouth. Get medical attention if symptoms occur.	
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	: No specific measures ide	ntified.
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Section: 5.	FIREFIGHTING	MEASURES
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5.1 Extinguishing media

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local 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) Sulphur oxides 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.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	: 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 : No special environmental precautions required.

6.3 Methods and materials for containment and 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.

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	: For personal protection see section 8. Wash hands after handling.	
Hygiene measures	: Wash hands before breaks and immediately after handling the product.	
7.2 Conditions for safe storage, including any incompatibilities		

Requirements for storage areas and containers	:	Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
Suitable material	:	Keep in properly labelled containers.

7.3 Specific end uses

Specific use(s) : RINSE AID

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Isopropanol	67-63-0	TWA	400 ppm 999 mg/m3	UKCOSSTD
		STEL	500 ppm 1,250 mg/m3	UKCOSSTD

DNEL

DNEL	
Isopropanol	: End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 888 mg/cm2
	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 500 mg/m3
	End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 319 mg/cm2
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 89 mg/m3
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 26 ppm

PNEC

PNEC	
Isopropanol	: Fresh water Value: 140.9 mg/l
	Marine water Value: 140.9 mg/l
	Intermittent use/release Value: 140.9 mg/l
	Fresh water Value: 552 mg/kg
	Marine sediment Value: 552 mg/kg
	Soil Value: 28 mg/kg

Sewage treatment plant Value: 2251 mg/l
Oral Value: 160 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures				
Hygiene measures	: Wash hands before breaks and immediately after handling the product.			
Eye/face protection (EN 166)	: No special protective equipment required.			
Hand protection (EN 374)	: No special protective equipment required.			
Skin and body protection (EN 14605)	: Wear suitable protective clothing.			
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 controls				
General advice	: Consider the provision of containment around storage vessels.			

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	blue
Odour	:	Characteristic
Flash point	:	> 100 °C
рН	:	6.7 - 7.5, (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	: 0.990 - 1.010
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 : None known

10.6 Hazardous decomposition products

Hazardous decomposition products	: Depending on combustion properties, decomposition products may include following materials:
	Carbon oxides nitrogen oxides (NOx)
	Sulphur oxides
	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	: There is no data available for this product.
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	
Acute oral toxicity	: C12-C14 LINEAR ALCOHOL ETHYLENE OXIDE/PROPYLENE OXIDE ADDUCT LD50 rat: > 2,000 mg/kg
	lsopropanol LD50 rat: 5,840 mg/kg
	Dimethyl-Dioctyl-Ammonium Chloride LD50 rat: 238 mg/kg
Components	
Acute inhalation toxicity	: Isopropanol LC50 rat: > 30 mg/l Exposure time: 4 h

Test atmosphere: vapour

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		Dimethyl-Dioctyl-Ammonium Chloride LD50 rat: 0.07 mg/l Exposure time: 4 h Test atmosphere: dust/mist	
Components			
Acute dermal toxicity	:	C12-C14 LINEAR ALCOHOL ETHYLENE OXIDE/PROPYLENE OXIDE ADDUCT LD50 rat: > 5,000 mg/kg	
		Isopropanol LD50 rabbit: 12,870 mg/kg	
		Dimethyl-Dioctyl-Ammonium Chloride LD50 rabbit: 259 mg/kg	
Potential Health Effects			
Eyes	:	Health injuries are not known or expected under normal use.	
Skin	:	Health injuries are not known or expected under normal use.	
Ingestion	:	Health injuries are not known or expected under normal use.	
Inhalation	:	Health injuries are not known or expected under normal use.	
Chronic Exposure	:	Health injuries are not known or expected under normal use.	
Experience with human expos	ure)	
Eye contact	:	No symptoms known or expected.	
Skin contact	:	No symptoms known or expected.	
Ingestion	:	No symptoms known or expected.	
Inhalation	:	No symptoms known or expected.	
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	 C12-C14 LINEAR ALCOHOL ETHYLENE OXIDE/PROPYLENE OXIDE ADDUCT 48 h LC50 Leuciscus idus (Golden orfe): > 1 mg/l
	Isopropanol 96 h LC50 Pimephales promelas (fathead minnow): 9,640 mg/l
	Dimethyl-Dioctyl-Ammonium Chloride 96 h LC50 Oncorhynchus mykiss (rainbow trout): 0.35 mg/l
Components	
Toxicity to daphnia and other aquatic invertebrates	 C12-C14 LINEAR ALCOHOL ETHYLENE OXIDE/PROPYLENE OXIDE ADDUCT 24 h EC50 Daphnia magna (Water flea): > 1 mg/l
	lsopropanol LC50 Daphnia magna (Water flea): > 10,000 mg/l
	Dimethyl-Dioctyl-Ammonium Chloride 96 h LC50: 0.073 mg/l
Components	
Toxicity to algae	 C12-C14 LINEAR ALCOHOL ETHYLENE OXIDE/PROPYLENE OXIDE ADDUCT 72 h EC50 Desmodesmus subspicatus (green algae): > 1 mg/l
	Dimethyl-Dioctyl-Ammonium Chloride 72 h EC50 Pseudokirchneriella subcapitata (algae): 0.122 mg/l
Components	
Toxicity to bacteria	: Isopropanol 1,050 mg/l
Components	
Toxicity to fish (Chronic toxicity)	 Dimethyl-Dioctyl-Ammonium Chloride 33 d NOEC Pimephales promelas (fathead minnow): 0.018 mg/l
Components	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: Dimethyl-Dioctyl-Ammonium Chloride 21 d NOEC Daphnia magna (Water flea): 0.027 mg/l
Persistence and degradability	
Product	
no data available	

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Biodegradability	 C12-C14 LINEAR ALCOHOL ETHYLENE OXIDE/PROPYLENE OXIDE ADDUCT Result: Readily biodegradable. Isopropanol Result: Readily biodegradable. Dimethyl-Dioctyl-Ammonium Chloride 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 CONSIDE	RATIONS	

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	: Organic 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)	Not applicable.
14.1 UN number:	PRODUCT IS NOT REGULATED DURING
14.2 UN proper shipping name:	TRANSPORTATION
14.3 Transport hazard class(es):	Not applicable.
14.4 Packing group:	Not applicable.
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.
Air transport (IATA)	Not applicable.
14.1 UN number:	PRODUCT IS NOT REGULATED DURING
14.2 UN proper shipping name:	TRANSPORTATION
14.3 Transport hazard class(es):	Not applicable.
14.4 Packing group:	Not applicable.
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.
Sea transport (IMDG/IMO) 14.1 UN number: 14.2 UN proper shipping name: 14.3 Transport hazard class(es): 14.4 Packing group: 14.5 Environmental hazards: 14.6 Special precautions for user: 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not applicable. PRODUCT IS NOT REGULATED DURING TRANSPORTATION Not applicable. Not applicable. No Not applicable. Not applicable.

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 acco	ording to REGULATION (EC) No 1272/2008

Classification	Justification
Not a hazardous substance or mixture.	Calculation method

Full text of H-Statements

H225

Highly flammable liquid and vapour.

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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.