Auto Klene Solutions

Chemwatch Hazard Alert Code: 3

Issue Date: 21/05/2015 Print Date: 16/10/2017

S.GHS.AUS.EN

Chemwatch: **5175-94** Version No: **2.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

Product name	MAGIC PRESOAK
Synonyms	Not Available
Proper shipping name	CAUSTIC ALKALI LIQUID, N.O.S. (contains sodium hydroxide)
Other means of identification	Not Available

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

Relevant identified uses	One Shot cleaner for bay touchless car wash machines.
--------------------------	---

Details of the supplier of the safety data sheet

Registered company name	Auto Klene Solutions
Address	1/83 Merrindale Drive Croydon VIC 3136 Australia
Telephone	+61 3 8761 1900
Fax	+61 3 8761 1955
Website	https://www.autoklene.com/msds/
Email	Not Available

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	131 126 (Poisons Information Centre)
Other emergency telephone numbers	0800 764 766 (New Zealand Poisons Information Centre)

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	0	1
Toxicity	1	0 = Minimum
Body Contact	3	1 = Low 2 = Moderate
Reactivity	1	3 = High
Chronic	0	4 = Extreme

Poisons Schedule	S5
Classification ^[1]	Metal Corrosion Category 1, Skin Corrosion/Irritation Category 1A, Serious Eye Damage Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)	
SIGNAL WORD	DANGER

Hazard statement(s)

nazaru statement(s)	
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement(s) Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P234	Keep only in original container.
P273	Avoid release to the environment.

Precautionary statement(s) Response

recautionary statement(s) response	
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.

Precautionary statement(s) Storage

P405 Store locked up.

Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
Not Available	5-10	alkaline salts.
68989-03-7	0-10	guatemary cocoamine dimethyl sulfate, ethoxylated
1310-73-2	<5	sodium hydroxide
6834-92-0	<5	sodium metasilicate, anhydrous
Not Available	0-15	Ingredients determined not to be hazardous
7732-18-5	balance	water

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor. Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor or person authorised by him/her. (ICSC13719)
Ingestion	 For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

For acute or short-term repeated exposures to highly alkaline materials:

Respiratory stress is uncommon but present occasionally because of soft tissue edema.

Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.

- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.

Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.

Alkalis continue to cause damage after exposure.

INGESTION:

Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.

Neutralising agents should never be given since exothermic heat reaction may compound injury.

* Catharsis and emesis are absolutely contra-indicated.

* Activated charcoal does not absorb alkali.

* Gastric lavage should not be used.

Supportive care involves the following:

Withhold oral feedings initially.

▶ If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.

Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.

Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:

Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

For exposures to quaternary ammonium compounds;

- For ingestion of concentrated solutions (10% or higher): Swallow promptly a large quantity of milk, egg whites / gelatin solution. If not readily available, a slurry of activated charcoal may be useful. Avoid alcohol. Because of probable mucosal damage omit gastric lavage and emetic drugs.
- For dilute solutions (2% or less): If little or no emesis appears spontaneously, administer syrup of Ipecac or perform gastric lavage.
- If hypotension becomes severe, institute measures against circulatory shock.
- If respiration laboured, administer oxygen and support breathing mechanically. Oropharyngeal airway may be inserted in absence of gag reflex. Epiglottic or laryngeal edema may necessitate a tracheotomy.
- + Persistent convulsions may be controlled by cautious intravenous injection of diazepam or short-acting barbiturate drugs. [Gosselin et al, Clinical Toxicology of Commercial Products]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Water spray or fog.

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	y Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result	
Advice for firefighters		
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use fire fighting procedures suitable for surrounding area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. 	
Fire/Explosion Hazard	 Non combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke. Decomposition may produce toxic fumes of: , carbon dioxide (CO2) , nitrogen oxides (NOx) , other pyrolysis products typical of burning organic material. May emit corrosive fumes. 	
HAZCHEM	2R	

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material. Check regularly for spills and leaks. Clean up all spills immediately.
--------------	---

	 Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	g
Safe handling	 DO NOT allow clothing wet with material to stay in contact with skin Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. DO NOT store near acids, or oxidising agents No smoking, naked lights, heat or ignition sources.
Conditions for safe storage,	including any incompatibilities
Suitable container	 Lined metal can, lined metal pail/ can. Plastic pail. Polyliner drum. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. For low viscosity materials Drums and jerricans must be of the non-removable head type. Where a can is to be used as an inner package, the can must have a screwed enclosure. For materials with a viscosity of at least 2680 cSt. (23 deg. C) and solids (between 15 C deg. and 40 deg C.): Removable head packaging; Cans with friction closures and I ow pressure tubes and cartridges may be used. Where combination packages are used, and the inner packages are of glass, porcelain or stoneware, there must be sufficient inert cushioning material in contact with inner and outer packages unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.
Storage incompatibility	 Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. Avoid contact with copper, aluminium and their alloys. Avoid reaction with oxidising agents Avoid contamination of water, foodstuffs, feed or seed.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

	· · /						
INGREDIENT DATA							
Source	Ingredient	Material name	TWA		STEL	Peak	Notes
Australia Exposure Standards	sodium hydroxide	Sodium hydroxide	Not Avai	ilable	Not Available	2 mg/m3	Not Available
EMERGENCY LIMITS							
Ingredient	Material name		٦	TEEL-1	TEEL-2		TEEL-3
sodium hydroxide	Sodium hydroxide		1	Not Available	Not Avail	able	Not Available
sodium metasilicate, anhydrous	Sodium metasilicate pentahydrate		e	6.6 mg/m3	73 mg/m3	3	440 mg/m3
sodium metasilicate, anhydrous	Sodium silicate; (Sodium metasilicate)		3	3.8 mg/m3	42 mg/m3	3	250 mg/m3
Ingredient	Original IDLH			Revise	ed IDLH		
alkaline salts.	Not Available			Not Ava	ailable		
quaternary cocoamine dimethyl sulfate, ethoxylated	Not Available			Not Ava	ailable		

sodium hydroxide	10 mg/m3	Not Available
sodium metasilicate, anhydrous	Not Available	Not Available
Ingredients determined not to be hazardous	Not Available	Not Available
water	Not Available	Not Available

Exposure controls

Appropriate engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effectives and will provide this high level of protection. The basic types of engineering controls are: Appropriate engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed the protections to provide this high level of protection. The basic types of engineering controls are: Prosonal protection Control isolation of ensistion source witch keeps a selected hazard 'physically' away from the worker and ventilation system must match the advanced or controls to prevent employee overexposure. Personal protection Control isolation of ensisting controls are remove or dulate an eiconterminant if designed property. The design of a ventilation system must match the advanced or controls to prevent employee overexposure. Eye and face protection - Chemical goggles. - Control isolation of ensisting to a special for supplementary but never for primary protection of eyes. - Control isolation of ensisting to advance or test. This should incude a review of lens absorption for the class of chemicals in use and an account of injut experience. Medical and fitters and yabobb ta indende or test strategical to advance or testicins on nucleon the remove and antistation and the set of testical prevent engineering advance or testical prevent advance advance and the protection below Wear chemical protection below - Wear density available, wear trousers or overalls outside of boots, to avoid spils entering boots. - Wear density available, wear trousers or overalls outside of boots, to avoid spils entering boots.		
Eye and face protection A Chamical goggles. Eye and face protection Contact lenses may pose a special hazard; soft contact lenses may absorts and concentrate irritants. A written policy document, describing the wearing of lenses or restatictions on use, should be created to each workplace or task. This should be retrained in their removal and assorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Skin protection See Hand protective gloves, e.g. PVC. Wear chemical protective gloves, e.g. PVC. Wear chemical sing toposition, use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Wear chemical protective gloves, e.g. PVC. Wear chemical site protective gloves, e.g. PVC. Hands/feet protection Wear chemical site shine ontact. Ne material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possitis entering on a surgerabalow on a several subatater.		highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.
Eye and face protection Full face shield may be required for supplementary but never for primary protection of eyes. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate initiants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be trained in their removal and suitable equipment should be trained in their removal and suitable equipment should be trained in their removal and suitable equipment should be trained in their removal and suitable equipment should be trained in their removal and suitable equipment should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Image: the integration of the integration of the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Not the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Image: the integration of the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Not the integration of sources and sources in events of overalls outside of boots, to avoid spills entering boots. Image: the integration of sources in sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. <td< th=""><th>Personal protection</th><th></th></td<>	Personal protection	
 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves, hands should be washed and dried throice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried throughly. Application of a non-perfumed moisturizer is recommended. Body protection See Other protection below Overalls. PVC Apron. PVC Apron. PVC Apron. PVC Apron. 	Eye and face protection	 Full face shield may be required for supplementary but never for primary protection of eyes. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment
Hands/feet protection Wear safety footwear or safety gumboots, e.g. Rubber When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. Hands/feet protection Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where he chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be wom on clean hands. After using gloves, hands should be washed and dried throughly. Application of a non-perfumed moisturizer is recommended. Body protection Overalls. PVC apron. PVC apron. PVC protective suit may be required if exposure severe. 	Skin protection	See Hand protection below
Other protection PVC Apron. PVC protective suit may be required if exposure severe. 	Hands/feet protection	 Wear safety footwear or safety gumboots, e.g. Rubber When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The seact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried
Other protection PVC Apron. • PVC protective suit may be required if exposure severe.	Body protection	See Other protection below
 Eyewash unit. Ensure there is ready access to a safety shower. 	Other protection	 PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit.
	Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

MAGIC PRESOAK

Material	CPI
BUTYL	С
NAT+NEOPR+NITRILE	С
IATURAL RUBBER	С
ATURAL+NEOPRENE	С
EOPRENE	С
IEOPRENE/NATURAL	С
ITRILE	С
ITRILE+PVC	С
E	С
E/EVAL/PE	С
VA	С
VC	С
ARANEX-23	С
ARANEX-23 2-PLY	С

Respiratory protection

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	AK-AUS / Class1 P2	-
up to 50	1000	-	AK-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	AK-2 P2
up to 100	10000	-	AK-3 P2
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that

TEFLON	С	
VITON	С	
VITON/CHLOROBUTYL	С	

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Appearance	earance Orange coloured liquid with amine odour; mixes with water.				
Physical state	Liquid	Liquid Relative density (Water = 1) ~1.1			
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable		
pH (as supplied)	13	Decomposition temperature	Not Available		
Melting point / freezing point (°C)	~0	Viscosity (cSt)	Not Available		
Initial boiling point and boiling range (°C)	~100	Molecular weight (g/mol)	Not Applicable		
Flash point (°C)	Not Applicable	Taste	Not Available		
Evaporation rate	Not Available	Explosive properties	Not Available		
Flammability	Not Applicable	Oxidising properties	Not Available		
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available		
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available		
Vapour pressure (kPa)	2.37 @ 20 degC	Gas group	Not Available		
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available		
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available		

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Not normally a hazard due to non-volatile nature of product Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane.
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	The material can produce chemical burns following direct contact with the skin. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. If applied to the eyes, this material causes severe eye damage.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Prolonged or repeated skin contact may cause degreasing, followed by drying, cracking and skin inflammation.

MAGIC PRESOAK	TOXICITY	IRRITATION
	Not Available	Not Available
quaternary cocoamine dimethyl	ΤΟΧΙΟΙΤΥ	IRRITATION
sulfate, ethoxylated	Not Available	Not Available
	ΤΟΧΙΟΙΤΥ	IRRITATION
	Not Available	Eye (rabbit): 0.05 mg/24h SEVERE
sodium hydroxide		Eye (rabbit):1 mg/24h SEVERE
		Eye (rabbit):1 mg/30s rinsed-SEVERE
		Skin (rabbit): 500 mg/24h SEVERE
	ΤΟΧΙΟΙΤΥ	IRRITATION
sodium metasilicate, anhydrous	dermal (rat) LD50: >5000 mg/kg ^[1]	Skin (human): 250 mg/24h SEVERE
	Oral (rat) LD50: >1000 mg/kg ^[2]	Skin (rabbit): 250 mg/24h SEVERE
	ΤΟΧΙΟΙΤΥ	IRRITATION
water	Not Available	Not Available
Legend:	1. Value obtained from Europe ECHA Registered Substar data extracted from RTECS - Register of Toxic Effect of c	nces - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified

SODIUM HYDROXIDE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.		
QUATERNARY COCOAMINE DIMETHYL SULFATE, ETHOXYLATED & WATER	No significant acute toxicological data identified in literature search.		
SODIUM HYDROXIDE & SODIUM METASILICATE, ANHYDROUS	The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.		
SODIUM HYDROXIDE &	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.		
SODIUM METASILICATE, ANHYDROUS	severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymp asthma) following an irritating inhalation is an infrequent disorder with rates related to the conce substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of expos	whocytic inflammation, without eosinophilia. RADS (or entration of and duration of exposure to the irritating sure due to high concentrations of irritating substance (often	
	severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymp asthma) following an irritating inhalation is an infrequent disorder with rates related to the conce substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of expos	hocytic inflammation, without eosinophilia. RADS (or intration of and duration of exposure to the irritating sure due to high concentrations of irritating substance (often difficulty breathing, cough and mucus production.	
ANHYDROUS	severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymp asthma) following an irritating inhalation is an infrequent disorder with rates related to the conce substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of expos particles) and is completely reversible after exposure ceases. The disorder is characterized by	hocytic inflammation, without eosinophilia. RADS (or intration of and duration of exposure to the irritating sure due to high concentrations of irritating substance (often difficulty breathing, cough and mucus production.	
ANHYDROUS Acute Toxicity	severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymp asthma) following an irritating inhalation is an infrequent disorder with rates related to the conce substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of expos particles) and is completely reversible after exposure ceases. The disorder is characterized by Carcinogenicity	hocytic inflammation, without eosinophilia. RADS (or intration of and duration of exposure to the irritating sure due to high concentrations of irritating substance (often difficulty breathing, cough and mucus production.	
ANHYDROUS Acute Toxicity Skin Irritation/Corrosion	severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymp asthma) following an irritating inhalation is an infrequent disorder with rates related to the conce substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of expos particles) and is completely reversible after exposure ceases. The disorder is characterized by Carcinogenicity Reproductivity	hocytic inflammation, without eosinophilia. RADS (or intration of and duration of exposure to the irritating ure due to high concentrations of irritating substance (often difficulty breathing, cough and mucus production.	

Legend: X –

Data available but does not fill the criteria for classification
 Data available to make classification

S – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity					
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
MAGIC PRESOAK	Not Available	Not Available	Not Available	Not Available	Not Available
· · · · · · · · · · · · · · · · · · ·	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
quaternary cocoamine dimethyl sulfate, ethoxylated	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
sodium hydroxide	LC50	96	Fish	125mg/L	4
	NOEC	96	Fish	56mg/L	4
P	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
sodium metasilicate, anhydrous	LC50	96	Fish	180mg/L	1

	ENDPOINT TEST DURATION (HR)	SPECIES	VALUE SOURCE
water	Not Available Available	Not Available	Not Not Available Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, E (Japan) - Bioconcentration Data 7. METI (Japan) - Biocor	Ecotox database - Aquatic Toxicity Data 5. ECETOC	

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Surfactants are in general toxic to aquatic organisms due to their surface-active properties. Historically, synthetic surfactants were often composed of branched alkyl chains resulting in poor biodegradability which led to concerns about their environmental effects. Today however, many of them, for example those used in large amounts, globally, as detergents, are linear and therefore readily biodegradable and considered to be of rather low risk to the environment. A linear structure of the hydrophobic chain facilitates the approach of microorganism while branching, in particular at the terminal position, inhibits biodegradation. Also, the bioaccumulation potential of surfactants is usually low due to the hydrophilic units. Linear surfactants are not always preferred however, as some branching (that ideally does not hinder ready biodegradability) is often preferable from a performance point of view. The reduction in waste water of organic contaminants such as surfactants can either be a consequence of adsorption onto sludge or aerobic biodegradation in the biological step.

for Quaternary Ammonium Compounds (QAC's): QAC's are white, crystalline powders. Low molecular weight QACs are very soluble in water, but slightly or not at all soluble in solvents such as ether, petrol and benzene. As the molecular weight and chain lengths increases, the solubility in polar solvents (e.g. water) decreases and the solubility in non-polar solvents increases. Environmental Fate: A major part of the QACs is discharged into wastewater and removed in the biological processes of sewage treatment, however; the aerobic and anaerobic biodegradability of QACs is not well investigated. Only sparse data are available concerning stability, solubility and biodegradability. In general, it seems that the biodegradability decreases with increasing numbers of alkyl chains. Within each category the biodegradability seems inversely proportional to the alkyl chain length.

Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
sodium hydroxide	LOW	LOW
water	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
sodium hydroxide	LOW (LogKOW = -3.8796)
water	LOW (LogKOW = -1.38)

Mobility in soil

Ingredient	Mobility
sodium hydroxide	LOW (KOC = 14.3)
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Recycling Disposal (if all else fails)
	This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may
	be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this
	type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
Product / Packaging disposal	 DO NOT allow wash water from cleaning or process equipment to enter drains.
	It may be necessary to collect all wash water for treatment before disposal.
	In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
	Where in doubt contact the responsible authority.
	▶ Recycle wherever possible.
	 Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
	Treat and neutralise at an approved treatment plant.
	Treatment should involve: Neutralisation with suitable dilute acid followed by: burial in a land-fill specifically licensed to accept chemical and / or
	pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).
	Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	No. Contraction of the second		
Marine Pollutant			
HAZCHEM	2R		
Land transport (ADG)			
UN number	1719		
UN proper shipping name	CAUSTIC ALKALI LIQUID, N.O.S. (contains sodium hydroxide)		
Transport hazard class(es)	Class 8 Subrisk Not Applicable		
Packing group	Ш		
Environmental hazard	Environmentally hazardous		
Special precautions for user	Special provisions 223 274 Limited quantity 5 L		
Air transport (ICAO-IATA / DGF)		
UN number	1719		
UN proper shipping name	Caustic alkali liquid, n.o.s. * (contains sodium hydroxide)		
Transport hazard class(es)	ICAO/IATA Class 8 ICAO / IATA Subrisk Not Applicable ERG Code 8L		
Packing group	Ш		
Environmental hazard	Environmentally hazardous		
Special precautions for user	Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Limited Quantity Packing Instructions Passenger and Cargo Limited Maximum Qty / Pack	A3 A803 856 60 L 852 5 L Y841 1 L	

Sea transport (IMDG-Code / GGVSee)

UN number	1719	
UN proper shipping name	CAUSTIC ALKALI LIQU	UID, N.O.S. (contains sodium hydroxide)
Transport hazard class(es)	IMDG Class 8 IMDG Subrisk No	lot Applicable
Packing group	III	
Environmental hazard	Marine Pollutant	
Special precautions for user	EMS Number Special provisions Limited Quantities	F-A , S-B 223 274 5 L

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

QUATERNARY COCOAMINE DIMETHYL SULFATE, ETHOXYLATED(68989-03-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Inventory of Chemical Substances (AICS)

SODIUM HYDROXIDE(1310-73-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

SODIUM METASILICATE, ANHYDROUS(6834-92-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Y
Canada - NDSL	N (quaternary cocoamine dimethyl sulfate, ethoxylated; water; sodium metasilicate, anhydrous; sodium hydroxide)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	N (quaternary cocoamine dimethyl sulfate, ethoxylated)
Japan - ENCS	N (quaternary cocoamine dimethyl sulfate, ethoxylated; water)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	N (quaternary cocoamine dimethyl sulfate, ethoxylated)
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
quaternary cocoamine dimethyl sulfate, ethoxylated	68989-03-7, 197664-72-5, 307315-38-4
sodium hydroxide	1310-73-2, 12200-64-5

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.