

SHIFTER**1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: **SHIFTER DETERGENT**
Other Names: Caustic Alkali Liquid N.O.S
Manufacturer's Product Code: SHIF5, SHIF20
Product Use: Hard-surface cleaner.

COMPANY DETAILS

Company: Agar Cleaning Systems Pty. Ltd.
Address: 12-14 Cope Street, Preston, Vic. 3072
Telephone: 03 9480 3000 Facsimile: 03 9480 5100
Web: www.agar.com.au
Agar MSDS are available from this website.
E-mail: admin@agar.com.au

Emergency Telephone Number: 131 126 (Aust wide)

2 HAZARDS IDENTIFICATION

Hazardous according to criteria of Worksafe Australia.
Corrosive C.

R34 Causes burns.

R41 Risk of serious damage to eyes.

S2 Keep out of the reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 Wear suitable gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

Shifter becomes non-hazardous at concentrations below 29%

3 COMPOSITION / INFORMATION ON INGREDIENTS**Ingredients:**

Chemical Entity:	CAS No.:	Proportion:
2-butoxy ethanol	111-76-2	< 10 %
sodium metasilicate	6834-92-0	< 10 %
monoethanolamine	141-43-5	< 10 %
sodium hydroxide	1310-73-2	< 10 %
sequestrants	non-haz	< 10 %
anionic surfactant	non-haz	10% - < 30 %
water	7732-18-5	>60 %

4 FIRST AID MEASURES

Poisons Information Centre: Phone 131 126

Swallowed: If poisoning occurs, contact a doctor or Poisons Information Centre. Seek urgent medical assistance. If swallowed, do NOT induce vomiting. Give a glass of water. Rinse mouth with water. Never give anything by mouth to an unconscious person.

Eye: Immediately hold the eyes open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to doctor or hospital without delay. Removal of contact lenses should only be undertaken by skilled personnel.

Skin: Remove any contaminated clothing and flush area with water. Seek medical attention in the event of irritation.

Inhaled: Risk of side-effects from inhalation is considered to be low, but if effects occur, remove patient to fresh air.

Notes to Physician: Treat symptomatically as for alkaline material.

5 FIRE FIGHTING MEASURES

Fire/Explosion Hazard: Shifter is not combustible.

Fire Extinguishing media: Water spray or fog. Foam. Dry chemical powder. Carbon dioxide.

Fire Fighter's PPE : Wear SCBA and chemical splash suit. Fully encapsulating, gas-tight suits should be worn for maximum protection. Structural fire-fighters uniform is NOT effective for this material.

Special fire-fighting procedures: None.

Unusual fire hazards: None.

Hazardous products of combustion: May yield toxic fumes.

6 ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources within 50m. Clean up all spills immediately. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Stop leak if safe to do so – prevent entry into waterways, drains or pits. Cover with DRY earth, sand or non-combustible material followed by plastic sheet to minimise spreading or contact with rain. DO NOT get water inside containers.

If spilled on clothing, it should be removed and laundered before re-use.

7 HANDLING AND STORAGE

Storage and Transport: Store in a cool, dry place that is well ventilated and away from foodstuff containers. Keep containers closed at all times. Keep out of reach of children.

Incompatibility (Materials to avoid for purposes of transport, handling and storage only): Not to be loaded with Class 4.3, Class 5, Class 8 (strong acids) or foodstuffs. Store away from acids.

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8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: None assigned for mixture. Data for principal ingredients only:

Atmospheric Contaminant Exposure Standard for:
2-butoxy ethanol TWA 25 ppm 'Skin'
sodium hydroxide TWA 2mg/cu.m.
monoethanolamine TWA 3 ppm, 7.5 mg/cu.m.
STEL 6 ppm, 15 mg/cu.m.

Engineering Controls: Mechanical Ventilation: Not required.

Personal Protection:

Gloves – Impervious natural rubber, butyl rubber, nitrile or PVC gloves should be worn.

Note: Resistance of glove materials can vary. Evaluate resistance under conditions of use and maintain PPE carefully.

Eye-protection - Suitable eye/face protection should be worn.

Other - Protective overalls and boots are desirable. An eyewash unit should be available.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Opaque viscous orange liquid
Odour: Butyl odour
pH = 13 – 14
Vapour Pressure: N/K
Vapour Density: N/K
Boiling Point : 100°C
Freezing Point: < 0°C
Solubility in water: Infinitely miscible
Specific Gravity : 1.13
Evaporation rate: As water
% Volatile by vol: 80 - 90%

10 STABILITY AND REACTIVITY

Stable.

Do not store in aluminium or galvanised containers.

Hazardous polymerization: None.

11 TOXICOLOGICAL INFORMATION

Health Effects: *Acute* –

Swallowed: Corrosive to the gastro-intestinal tract if swallowed.

Eye: Corrosive and irritating to the eyes.

Skin: Principal route of exposure is usually by skin contact.

One component may be absorbed by the skin and is capable of causing skin reactions. Corrosive and irritating to the skin on contact. Repeated or prolonged skin contact may cause burns, swelling, blistering or dermatitis.

Inhalation: Risk is low if product is used as directed, but breathing of concentrated vapour should be avoided.

Health Effects: *Chronic* - None known.

Toxicity data: Not available for mixture.

2-butoxy ethanol: Acute oral (rat) LD50: 1480 mg/kg.
Inhalation (LC50) (mouse): 700 ppm/7hrs.

sodium metasilicate: oral (rat) LD50: 1153 mg/kg.
ethanolamine: oral (rat) LD50: 2050 mg/kg.
dermal (rabbit) LD50: 1000 mg/kg.
sodium hydroxide: oral lowest lethal dose (rabbit):-
500 mg/kg (10% solution).

(Note: this data is from published information. Agar Cleaning Systems does not carry out animal tests).

12 ECOLOGICAL INFORMATION

Ecotoxicity: No information available.

Persistence and degradability: The surfactants in Shifter are biodegradable.

Mobility: -

Advice: -

13 DISPOSAL CONSIDERATIONS

For disposal, refer to State Land Waste Management Authority.

14 TRANSPORT INFORMATION

UN No.: 1719 | Class: 8 | Packg.Group: II | Hazchem: 2R

15 REGULATORY INFORMATION

Poisons Schedule Number: Schedule 5.

16 OTHER INFORMATION

AICS Listing: All components of Shifter are listed on the Australian Inventory of Chemical Substances (AICS).

Date: This MSDS issued: April 24, 2006

Abbreviations: N/K = Not Known

TWA = Time Weighted average

STEL = Short term exposure limit

CAS = Chemical Abstracts Service

N/A = Not applicable

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End of MSDS.