

MATERIAL SAFETY DATA SHEET

CHLORINE, COLOR REFERENCE 2

Last updated on 17th October 2008

EUTECH INSTRUMENTS PTE LTD.

Blk 55, Ayer Rajah Crescent, #04-16/24, Singapore 139949

Tel: (65) 6778 6876, Fax: (65) 6773 0836

Website: <http://www.eutechinst.com>

E-mail: eutech@thermofisher.com

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from the use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and purposes.

SITE SPECIFIC INFORMATION

No site-specific information.

MATERIAL IDENTIFICATION AND INFORMATION

Components – Chemical Name & Common Name:	CHLORINE, COLOR REFERENCE 2
COMPOSITION / INFORMATION ON INGREDIENTS	Aqueous Solution of Inorganic Components
Use / Description of Product :	Harmful

PHYSICAL/ CHEMICAL CHARACTERISTICS

State	liquid
Color	Pale Red
Relative Density:	1.0
Solubility in water:	Highly soluble

FIRE AND EXPLOSION DATA

Exposure Hazards:	In combustion emits toxic fumes.
Protection of Fire-fighters:	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
Fire Extinguishing Media:	Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

FIRST AID MEASURES (SYMPTOMS & ACTION)

Ingestion:	There may be irritation of the throat. Wash out mouth with water. Consult a doctor.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest. Remove casualty from exposure ensuring one's own safety whilst doing so.
Skin contact:	There may be mild irritation at the site of contact. Wash immediately with plenty of soap and water.
Eye contact:	There may be irritation and redness. Bathe the eye with running water for 15 minutes.

STABILITY AND REACTIVITY DATA

Stability:	Stable under normal conditions
Condition to avoid:	Heat
Materials to avoid:	Strong oxidising agents. Strong acids.
Hazardous decomposition products:	In combustion emits toxic fumes.

ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Turn leaking containers leak-side up to prevent the escape of liquid.
Environmental Precautions:	Do not discharge into drains or rivers. Contain the spillage using bunding.
Clean-up Procedures:	Absorb into dry earth or sand. Transfer to a closable, labeled salvage container for disposal by an appropriate method.

HANDLING, STORAGE AND DISPOSAL CONSIDERATIONS

Handling Requirements:	Ensure there is sufficient ventilation of the area.
Storage conditions:	Store in cool, well ventilated area. Keep container tightly closed.
Disposal Operations:	D1 Tipping above or underground (e.g. landfill, etc.).
Disposal of Packaging:	Clean with water. Dispose of as normal industrial waste.
NB:	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures:	Ensure there is sufficient ventilation of the area.
Respiratory Protection:	Self-contained breathing apparatus must be available in case of emergency.
Hand Protection:	Protective gloves.
Eye Protection:	Safety glasses. Ensure eye bath is to hand.
Skin Protection:	Protective clothing.

TOXICOLOGICAL AND ECOLOGICAL INFORMATION

Main hazards:	Harmful if swallowed. May cause sensitization by skin contact
Chronic Toxicity:	May cause cancer by ingestion.
Mobility:	Readily absorbed into soil.
Persistence and Degradability:	No data available.
Bioaccumulative potential:	No data available.
Other adverse effects:	Harmful to aquatic organisms.

TRANSPORTATION DATA AND ADDITIONAL INFORMATION

Domestic (D.O.T.)

Proper shipping name:	Chemicals, N.O.S. (non-regulated)
-----------------------	-----------------------------------

International (I.M.O.)

Proper shipping name:	Chemicals, N.O.S. (non-regulated)
-----------------------	-----------------------------------

Air (I.C.A.O.)

Proper shipping name:	Chemicals, N.O.S. (non-regulated)
-----------------------	-----------------------------------

REGULATORY INFORMATION

Risk phrases: R22: R43:	Harmful if swallowed May cause sensitization by skin contact.
Safety phrases: S24/25: S36/37/39:	Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye / face protection.
Precautionary phrases:	Caution - substance not yet fully tested.
Note:	The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

Other Information:	Created by Scafell Organics Ltd Classified as Harmful, and Dangerous to the Environment, R49;22;42/43, by chemical composition. However in such dilute solution, not considered to require this classification
Legal Disclaimer:	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product. [final page]

Copyright © 2008 Eutech Instruments Pte Ltd. eutech@thermofisher.com