

Revision date: R1-01/00/2018

Section1: Manufacturer and Substance Identification:

CHEMFAB ALKALIS LIMITED

Gnanananda place

Kalapet

Puducherry- 605014

India.

UN #: 1017

Molecular mass: 70.9

SECTION: 1. Product and company identification

Emergency Contact number: 0413- 2655111-113

Email: chemfabalkalis@drroaholings.com

Website: www.chemfabalkalis.com

AMAI CERN NO: 1800-11-1735

SECTION 2: Composition/Information on ingredients

Substance		
Name	Product identifier	%
Chlorine (Main constituent)	(CAS No) 7782-50-5	99.8 (min)

SECTION 3 : Hazard identification





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SECTION 4: First Aid Measures

EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Cough. Sore throat. Shortness of breath. Wheezing. Labored breathing. Symptoms may be delayed. See Notes.	Use breathing protection, closed system or ventilation.	Fresh air, rest. Half-upright position. Refer immediately for medical attention. Artificial respiration may be needed. See Notes.
Skin	ON CONTACT WITH LIQUID: FROSTBITE. Redness. Burning sensation. Pain. Skin burns.	Cold-insulating gloves. Protective clothing.	First rinse with plenty of water for at least 15 minutes, then remove contaminated clothes and rinse again. Refer immediately for medical attention.
Eyes	Watering of the eyes. Redness. Pain. Burns.	Wear face shield or eye protection in combination with breathing protection.	Rinse with plenty of water for several minutes (remove contact lenses if easily possible). Refer immediately for medical attention.
Ingestion		Do not eat, drink, or smoke during work.	

SECTION 5: Fire Fighting Measures

TYPES OF HAZARD / EXPOSURE	ACUTE HAZARDS / SYMPTOMS	PREVENTION	FIRST AID / FIRE-FIGHTING
FIRE	Not combustible but enhances combustion of other substances. Many reactions may cause fire or explosion.	NO contact with incompatible substances. See Chemical Dangers.	In case of fire in the surroundings, use appropriate extinguishing media.

SECTION 6: Accidental Release Measures



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General measures

: **DANGER: Oxidizing gas. Corrosive.** Evacuate personnel to a safe area.

Wear a self-contained breathing apparatus and appropriate personal protective equipment (PPE).

Approach suspected leak area with caution. Remove all sources of ignition. Toxic, corrosive vapor can spread from spill. Contact with flammable materials may cause fire or explosion. Ventilate area or move container to a well-ventilated area. Before entering the area, especially a confined area, check the atmosphere with an appropriate device. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.

SECTION 7: Handling and Storage

Precautions for safe handling

: Do not breathe gas/vapor. Avoid all contact with skin, eyes, or clothing.

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wear leather safety gloves and safety shoes when handling cylinders. Protect cylinders from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Never insert an object (e.g, wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Slowly open the valve. If the valve is hard to open, discontinue use and contact your supplier. Close the container valve after each use; keep closed even when empty. Never apply flame or localized heat directly to any part of the container. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents.

SECTION 8: Exposure Controls/Personal Protection:

Chlorine (7782-50-5)		
	TLV-TWA (ppm)	0.5 ppm
	TLV-STEL (ppm)	1 ppm

: Wear safety glasses with side shields. Wear goggles and a face shield when trans filling or Breaking transfer connections. Provide readily accessible eye wash stations and safety



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Showers. Wear safety glasses with side shields or goggles when trans filling or breaking transfer
: Wear metatarsal shoes and work gloves for cylinder handling, and protective clothing.

SECTION 9: Physical and Chemical Properties.

Physical state : Gas
Appearance : Greenish-yellow gas. Amber liquid (under pressure).
Molecular mass : 70.92 g/mol
Color : Greenish yellow gas.
Odor : Pungent.

pH : Not applicable.

Relative evaporation rate
(ether=1) : Not applicable.

Freezing point : -101°C (-419.85°F) at 1 atm.
Boiling point : -34.05 °C (-29.25°F)
Flash point : Not applicable.
Critical temperature : 144 °C
Auto-ignition temperature : Not applicable.

Vapor pressure : 6.9 bar (100 psia) (@20°C [68°F])
Critical pressure : 77.11 bar (1118.4 psia)
Relative vapor density at 20 °C : No data available
Relative density (liquid) : 1.468 at 0°C

Relative gas density : 2.482 at 0°C at atmosphere (Air =1)
Solubility at
30°C In water : 8620 mg/l

SECTION 10: Stability and Reactivity.

No reactivity hazard other than the effects described in sub-sections below

SECTION 11: Toxicological Information.

Skin corrosion/irritation : CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

Serious eye damage/irritation : CAUSES SERIOUS EYE DAMAGE.

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SECTION 12: Ecological Information.

Ecology - general : VERY TOXIC TO AQUATIC LIFE.

SECTION 13: Disposal Consideration.

Evacuate danger area! Consult an expert! Personal protection: gas-tight chemical protection suit including self-contained breathing apparatus. Ventilation. Shut off cylinder if possible. Isolate the area until the gas has dispersed. NEVER direct water jet on liquid. Remove gas with fine water spray. Do NOT let this chemical enter the environment.

SECTION 14: Transport Information:

GHS Classification

Signal: Danger

Contains gas under pressure; may explode if heated

Fatal if inhaled

Causes severe skin burns and eye damage

May cause respiratory irritation

May cause damage to lungs through prolonged or repeated exposure if inhaled

Very toxic to aquatic life



SECTION 15: Regulatory Information:

Based on EPA,NFPA, NIOSH,OHA- Occupational exposure limits

TLV: 0.5 ppm(1ppm as per Factory act) as TWA; 1 ppm as STEL

SECTION 16: Other Information:

The Information provided in this MSDS is given in good faith and is correct to the best of our knowledge and information at the date of Publication. It is designed only a guidance of safe handling, transportation, use and disposal. No Warranty is expressed or implied.

Contact: Section 1

Disclaimer:



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Revision History:

Revision	Effective date	Changed Date