

5. FIRE FIGHTING MEASURES

FLASH POINT: Not applicable; gas.

AUTOIGNITION: None

FLAMMABLE LIMITS IN AIR BY VOLUME: NA

EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding fire

SPECIAL FIRE FIGHTING INSTRUCTIONS: Wear self-contained respiratory protective device.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Contains gas under pressure

Cylinders may rupture violently if sidewalls are exposed to direct flame impingement.

Cylinders exposed to fire should not be moved until they have reached ambient temperature.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR

SPILLED: Before dealing with spillage take the necessary protective measures, inform others to keep at a safe distance. Contact supplier for specific assistance. Allow gas to escape to atmosphere, preferably in an open remote location. Prevent vented gas from re-entering ventilation intakes, low-lying spaces, cellars, drains, sewers or similar.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN STORAGE: Store cylinders upright in an enclosure, preferably outside of buildings, protected from direct sunlight. Secure cylinders by chains or similar device to prevent falling over. Store cylinders below 45°C. Keep away from flammable or combustible materials. Keep away from vehicular traffic and other thoroughfares. Prevent leaking gases from collecting in enclosed or low-lying spaces - gas is heavier than air. Protect from physical damage. Protect regulators and other fittings from impact.

High pressure gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty.

PRECAUTIONS TO BE TAKEN IN HANDLING:

should not be used as a substitute for compressed air in pneumatic equipment.

Use a first-in, first out inventory system to prevent full containers from being stored for long periods of time.

PRECAUTIONS TO BE TAKEN IN HANDLING:

Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles.

Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION ENGINEERING CONTROLS

ENGINEERING CONTROLS:

VENTILATION: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits

RESPIRATORY PROTECTION (SPECIFY TYPE): General Use: None required.

PROTECTIVE GLOVES: Work gloves are recommended when handling cylinders.

EYE PROTECTION: Safety glasses are recommended when handling cylinders.

OTHER PROTECTIVE EQUIPMENT: Safety shoes are recommended when handling cylinders.

PRECAUTIONS: Do not wear oily clothes. Do not use oily or greasy cloth for cleaning CO2 cylinder or valves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless gas

Boiling Point: Not applicable

Vapour Pressure: 6,300kPa @ 25°C

Volatiles: 100%

Evaporation Rate: Immediate

Odour: Odourless

Vapour Density: 1.53 @ 0°C (Air=1)

Weight per ml: 1.02g

Flash Point: None

Flammability Limits: None

Auto-Ignition Temperature: None

Other Properties: Extremely cold, colourless liquid. Forms a “dry ice”: frost on evaporation at normal pressures, which sublimates to gaseous carbon dioxide. May react violently with dusts of some metals.

10. STABILITY AND REACTIVITY

Moist Carbon Dioxide is corrosive, therefore acid resistant materials are required. May evolve toxic gasses if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

General: Carbon dioxide concentrations are in the air at:

- 3.5% - may cause increased respiration and headaches
- 8.15% - may cause nausea, headaches and vomiting. All which may lead to unconsciousness

12. ECOLOGICAL INFORMATION

General: Although a natural component of the earth's atmosphere, an increase in the atmospheric level of carbon dioxide has been linked with global warming. Therefore emission of Carbon Dioxide into the atmosphere should be minimised. Fumes from fabrication processes may be harmful to the environment.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not attempt to dispose of residual or unused quantities. Return cylinder properly labeled to Motukea Gas Company. Unserviceable cylinders should be returned for safe and proper disposal.

14. TRANSPORT INFORMATION

DOT/IMO SHIPPING NAME: CARBON DIOXIDE
HAZARD CLASS: 2.2
Hazchem code: 2TE
IDENTIFICATION NUMBER: UN 1013
PRODUCT RQ: None.
SHIPPING LABEL(s):

NONFLAMMABLE GAS, NON TOXIC

PLACARD (When required): CO2 Compressed

SPECIAL SHIPPING INFORMATION: Cylinders should be transported in a secure position, in a well ventilated vehicle. The transportation of compressed gas cylinders in automobiles or in closed-body vehicles can present serious safety hazards and should be discouraged.

15. REGULATORY INFORMATION

The following information concerns selected regulatory requirements potentially applicable to this product. Not all such requirements are identified. Users of this product are responsible for their own regulatory compliance on a federal, state [provincial], and local level.

Product related hazard information:

Poison schedule: Not scheduled

Safety phrases:

Keep container in a well-ventilated place.
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

16. OTHER INFORMATION

Prevent leaking gas from entering drains, gullies, natural depressions and enclosed spaces.

**INFORMATION PREPARED BY:
Motukea Gas Company Limited
Motukea Island, Porebada Road
Port Moresby, PNG**



The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Motukea Gas Company Limited be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Motukea Gas Company Limited has been advised of the possibility of such damages.