

SAFETY DATA SHEET

CARBON DIOXIDE

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2.2: Non Flammable
Non Toxic Gas

1. COMPANY DETAILS

COMPANY: TESUCO PTY LTD
ADDRESS: UNIT 1A / 107 CARNARVON STREET SILVERWATER
NSW 2128
PHONE : 1800 631 511
FAX: 1800 640 604

2. IDENTIFICATION / COMPOSITION OF CONTENTS

CONTAINER: NON REFILLABLE CYLINDER WITH A CAPACITY OF < 2.2 L
PRODUCT NAME: CARBON DIOXIDE (FOOD GRADE)
CONCENTRATION: 100%
PURITY: 99.995
CHEMICAL COMPOUND: CO₂
UN NUMBER: 1013
CLASS: 2.2
CAS NO: 7727-37-9
USE: Beverage Applications

3. HAZARD IDENTIFICATION

- LIQUIFIED GAS
- IN HIGH CONCENTRATION IT CAN CAUSE ASPHYXIATION

4. FIRST AID MEASURES

4.1. Inhalation

- In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.
- Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped. -Low concentrations of CO₂ cause increase respiration and headache. Average concentrations (5-15%) cause headache and nausea until losing consciousness. High concentrations give rise to unconsciousness and loss of mobility.

4.2. Eye contact

- immediately flush thoroughly with water for at least 15 minutes.
- In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing. Medical assistance

4.3. Skin contact

- immediately flush with water for at least 15 minutes
- in case of frostbite spray with water for at least 15 minutes, apply a sterile dressing. Medical assistance

4.4. Ingestion

- Ingestion is not considered a potential route of exposure (gas)

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media

- All known extinguishants can be used

5.2. Unsuitable extinguishing media

- None

5.3. Specific hazards

- Non flammable
- Exposure to fire may cause containers to rupture/explode

5.4. Special protective equipment for fire fighters

- In confined space use self-contained breathing apparatus

5.5. Other measures

- If possible, stop flow of product.
- Move away from the container and cool with water from a protected position.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

- Evacuate area.
- Ensure adequate air ventilation.
- Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

6.2. Environmental precautions

- Try to stop the release

6.3. Clean up methods

- Ventilate the area

7. HANDLING AND STORAGE

7.1. Handling

- Suck back of water into the container must be prevented.
- Do not allow back feed into the container.
- Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
- While moving the container, wear appropriate protective garment.
- Refer to supplier's container handling instructions.

7.2. Storage

- Keep container below 50°C in a well ventilated place

7.4. Packaging material

- Steel

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposition Values

Carbon Dioxide

SAEL 2004

TWA = 5000ppm

8.2. Personal protection

- Ensure adequate ventilation
- Devices for relieve the values limit of exposure (TLV).

8.2.1. Protection measures

8.2.1.1. Respiratory protection

- Keep self contained breathing apparatus readily available for emergency use

8.2.1.2. Hands protection

- Wear suitable gloves for handling the container
- 8.2.1.3. Eyes protection**
- Wear safety glasses
- 8.2.1.4. Skin protection**
- Wear suitable gloves for handling container or safety suit

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

Aspect : liquefied gas

Colour : colourless

Odour : odourless

9.2. Physical and chemical information

Boiling point : -78,5°C

Flash point : not applicable

Flammability range : not flammable

Oxidant property : not oxidant

Vapour Pressure : 57,3 bar (@20°C)

Relative density, gas (air=1): 1,52

Solubility in water: 2000 mg/l

10. STABILITY AND REACTIVITY

10.1. Condition to avoid

- Heating
- Leakage

10.2. Materials to avoid

- none

10.3. Hazardous decomposition products

- none

11. TOXICOLOGICAL INFORMATION

11.1. Toxicological information

-In high concentrations cause rapid circulatory insufficiency. Symptoms are headache, nausea and vomiting, which may lead to unconsciousness

12. ECOLOGICAL INFORMATION

12.1. Ecological effects information

-When discharged in large quantities may contribute to the greenhouse effect

-effect on ozone layer: none

-global warming factor: 1

-bioaccumulative potential: not established

-persistence and degradability: not known

13. DISPOSAL CONSIDERATION

13.1. General

- To atmosphere in a well ventilated place.
- Do not discharge into any place where its accumulation could be dangerous.
- Gas cylinders are disposable containers, can be recycled.
- Contact supplier if guidance is required

14. TRASPORT INFORMATION

UN No 1013

IATA Class:2.2

Labelling: not flammable, not toxic gas

PSN: not flammable, not toxic gas

Class IMDG: 2.2

Label: not flammable, not toxic gas

H.I. No: 20/1013

Labelling IMDG: not flammable, not toxic gas

ADR/ADNR Class: 2

Labelling: 2.2

H.I. No: 20/1066

Labelling ADR/RID: not flammable, not toxic gas

Class RID:2

Labelling: 2.2

H.I. No: 20/1013

Labelling ADR/RID: not flammable, not toxic gas

15. REGULATORY INFORMATION

15.1. EC Classification

- Not included in Annex I

16. OTHER INFORMATION

16.1. Regulations

- Ensure all national/local regulations are observed

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws. Details given in this document are believed to be correct at the time of going to press. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

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This sheet cancels and replaces the previous editions