

# SAFETY DATA SHEET

## CARBON DIOXIDE



2.2: Non Flammable  
Non Toxic Gas

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<b>1. DISTRIBUTING COMPANY DETAILS</b>
<b>COMPANY:</b> ZIP HEATERS PTY LTD <b>ADDRESS:</b> 67-77 ALLINGHAM ST CONDELL PARK NSW 2200 <b>PHONE :</b> 02 9796 3100 <b>FAX:</b> 02 9796 3858
<b>2. IDENTIFICATION / COMPOSITION OF CONTENTS</b>
<b>CONTAINER:</b> NON REFILLABLE CYLINDER WITH A CAPACITY OF < 2.2 L <b>PRODUCT NAME:</b> CARBON DIOXIDE (FOOD GRADE) <b>CONCENTRATION:</b> 100% <b>PURITY:</b> 99.995 <b>CHEMICAL COMPOUND:</b> CO <sub>2</sub> <b>UN NUMBER:</b> 1013 <b>CLASS:</b> 2.2 <b>CAS NO:</b> 7727-37-9 <b>USE:</b> Beverage Applications
<b>3. HAZARD IDENTIFICATION</b>
<ul style="list-style-type: none"><li>- LIQUIFIED GAS</li><li>- IN HIGH CONCENTRATION IT CAN CAUSE ASPHYXIATION</li></ul>
<b>4. FIRST AID MEASURES</b>
<b>4.1. Inhalation</b> - 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 CO <sub>2</sub> 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.
<b>4.2. Eye contact</b> -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
<b>4.3. Skin contact</b> -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
<b>4.4. Ingestion</b> - 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 relive 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. TRANSPORT 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.

### **Revised Edition Date: 15/12/2009**

This sheet cancels and replaces the previous editions

### **16.2 Supplier**

- Supplied by Tesuco Pty Ltd.