

## 1. PRODUCT AND COMPANY

**Product name:**  
**CO2 Extinguisher:** R2.0CO2,R3.5CO2,R5.0CO2,R3.5CO2S  
**Manufacturer:** Zhejiang Ruihua Machinery Co., Ltd.  
 Yuyao, Zhejiang P. R. China  
**Tel:** +86-574-6200 3798

## 2. COMPOSITION / CLASSIFICATION

Chemical name	Chemical formula	CAS no	Quota %
Carbon dioxide		124-38-9	>/=99.7%

## 3. HAZARD IDENTIFICATION

Liquefied gas. High concentration may cause asphyxiation.

## 4. FIRST AID MEASURES

### Inhalation

In high concentration may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.

Low concentration of CO2 cause increased respiration and headache.

Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

### Skin/eye contact

Immediately flush eyes thoroughly with water for at least 15min. In case of frostbite spray with water for at least 15min. Apply a sterile dressing. Obtain medical assistance.

### Ingestion

Ingestion is not considered a potential route of exposure.

## 5. FIRE FIGHTING MEASURES

**Flammable class:** Non flammable

**Specific hazards:** Exposure to fire may cause containers to rupture/explode

**Hazardous combustion products:** None.

**Extinguisher media -suitable extinguisher media:**

All known extinguisher can be used

**Specific method:** If possible, stop flow of products.

**Special protective equipment for fire fighters:**

In confined space use self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASES MEASURES

**Personal precautions:** Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate are ventilation.

**Environmental precautions:** Try to stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

**Clean up methods:** Ventilate area.

## 7. HANDLING AND STORAGE

**Storage:** below 50°C, dry and free from vibrations.

**Handling:** Such back of water into the container must be prevented. Do not allow backfeed 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. Refer to supplier's container handling instructions.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Personal protection:** Ensure adequate ventilation.

**Occupational Exposure Limits:** Carbon dioxide:  
 TLV@-TWA[ppm]:5000; NGV-Sweden-8h-[ppm]: 5000

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state at 20°C :** Liquid gas **Colour :** Colourless

**Odour :** Non **Molecular :** 44 **Melting point [°C]:** -56.6

**Boiling point [°C] :** -78.5 **Critical temperature [°C] :** 30

**Vapour pressure [20°C]:** 57.3bar **Relative density, gas (air=1):** 1.52

**Relative density, liquid (water=1):** 0.82

**Solubility in water[mg/l] :** 2000

**Flammability range [vol% in air] :** Non flammable

**Other data:** Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

## 10. STABILITY AND REACTIVITY

## 11. TOXICOLOGICAL PROPERTIES

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

## 12. ECOTOXICOLOGICAL INFORMATION

**Ecological effects information:** When discharged in large quantities may contribute to the greenhouse effect.

**Global warming potential[CO2=1]:** 1

## 13. DISPOSAL CONSIDERATION

**General:** Do not discharge into any place where its accumulation could be dangerous. To atmosphere in a well ventilated place. Discharge to atmosphere in large quantities should be avoided. Contact supplier if guidance is required.

## 14. TRANSPORT INFORMATION

ADR RID	IMDG	DGR (flyg)
UN nr: 1044 Class: 2 Ämnesnr: 6A Etikettnr: 2/LQ	UN no: 1044 Class: 2.2 EmS no: 2-13 MFAG no: 620 Packing group:	Class: C02 fire extinguisher

## 15. REGULATORY INFORMATION

**EC Classification:** Not classified as dangerous preparation/substance. Not included in Annex 1

**EC Labeling:** No EC labeling required. **Symbol(s):** None

**R Phrase(s):** None **S Phrase(s):** None

## 16. OTHER INFORMATION

Asphyxiant in high concentrations. Keep container in a well-ventilation place. Do not breathe the gas. Contact with liquid may cause cold burns/frostbite. Ensure all national/local regulations are observed. The hazard of asphyxiation is often overlooked and must be stressed during operator training. Sources of key data used: EIGA (European industrial Gases Association)/LISAM

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.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

## Emergency Contact Numbers

Ph 1300 733 064

Mobile 0402260959