

SIG SOUTHERN INDUSTRIAL GAS SDN BHD

CHEMICAL SAFETY DATA SHEET

CHLORODIFLUOROMETHANE, R22

1. IDENTIFICATION OF THE SUBSTANCE

Product name	Chlorodifluoromethane, R22
Chemical Formula	Chlorodifluoromethane, R22
Brand Name	SSB R22

2 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/	Substance
Preparation	
Components/	Contains no other components
Impurities	or impurities which will influence the classification of the product.
CAS Nr	75-45-6
EEC Nr	200-871-9

3 HAZARDS IDENTIFICATION

Hazards identification	Liquefied gas In high concentrations may cause asphyxiation
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4 FIRST AID MEASURES

Inhalation	In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. In low concentrations may cause narcotic effects. Symptoms may include dizziness, headache, nausea and loss of co-ordination. 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 15 minutes. In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing. Obtain medical assistance
Ingestion	Ingestion is not considered a potential route of exposure.

5 FIRE FIGHTING MEASURES

Specific hazards	Exposure to fire may cause containers to rupture/explode. Non flammable
Hazardous combustion products	Hazardous combustion products If involved in a fire the following toxic and/or corrosive fumes may be produced by thermal decomposition: Carbonyl fluoride Carbon monoxide Phosgene Hydrogen chloride Hydrogen fluoride
Suitable extinguishing media	All known extinguishants can be used.
Specific methods	If possible, stop flow of product.

Special protective equipment for fire fighters	Move away from the container and cool with water from a protected position. Use self-contained breathing apparatus and chemically protective clothing.
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6 ACCIDENTAL RELEASE MEASURES

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

Handling and Storage	Suck 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. Keep container below 50°C in a well ventilated place.
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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit value	LTEL:1000ppm
Personal protection	Ensure adequate ventilation. Do not smoke while handling product. Protect eyes, face and skin from liquid splashes.

9 PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight	86.5
Melting point	-157 °C
Boiling point	-40.9 °C
Critical temperature	96.2 °C
Relative density, gas	3 (air=1)
Relative density, liquid	1.2 (water=1)
Vapour Pressure 20°C	9.1 bar
Solubility mg/l water	3628 mg/l
Appearance/Colour	Colourless gas
Odour	Ethereal

Poor warning properties at low concentrations.

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

10 STABILITY AND REACTIVITY

Stability and	Stable under normal conditions.
Reactivity	Thermal decomposition yields toxic products which can be corrosive in the presence of moisture.

11 TOXICOLOGICAL INFORMATION

General	May produce irregular heart beat and nervous symptoms.
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12 ECOLOGICAL INFORMATION

General Covered by the 'Montreal Protocol'.
 May have damaging effect on ozone layer.
 When discharged in large quantities may contribute to the greenhouse effect.
 Ozone depletion factor 0.055 (R11=1)
 Global warming factor 1700 (CO2=1)

13 DISPOSAL CONSIDERATIONS

General Must not be discharged to atmosphere.
 Do not discharge into any place where its accumulation could be dangerous.
 Refer to supplier's waste gas recovery programme.
 Contact supplier if guidance is required.

14 TRANSPORT INFORMATION

Proper Shipping Name Chlorodifluoromethane (Refrigerant Gas R 22)
UN Nr 1018
Class/Div 2
ADR/RID
Classification Code 2A
ADR/RID Hazard Nr 20
Labelling ADR Label 2.2: non flammable non toxic gas.
Other transport information Avoid transport on vehicles where the load space is not separated from the driver's compartment.
 Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.
 Before transporting product containers ensure that they are firmly secured and:
 - cylinder valve is closed and not leaking
 - valve outlet cap nut or plug (where provided) is correctly fitted
 - valve protection device (where provided) is correctly fitted
 - there is adequate ventilation.
 - compliance with applicable regulations.

15 REGULATORY INFORMATION

Contact local government authority

16 OTHER INFORMATION

Although reasonable care has been taken in the preparation of this document we extend no warranties and make no representations as to the accuracy or completeness of the information contain herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s)

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