



# Safety Data Sheet

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## LASAL™ 105

### 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Commercial name	LASAL 105
Product name	Carbon Monoxide, Carbon Dioxide, Helium in Nitrogen
Chemical name/formula	CO, CO <sub>2</sub> , He in N <sub>2</sub>
Company identification	See header and footer
Emergency phone no.	See footer

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Preparation	Substance
Components/Impurities	Carbon Monoxide: 3 – 5% Carbon Dioxide: 7 - 10% Helium: 15 – 30% Nitrogen: 55 – 75%
CAS No.	630-08-0 Carbon Monoxide 124-29-9 Carbon Dioxide 7440-59-7 Helium 7727-37-9 Nitrogen

### 3. HAZARDS IDENTIFICATION

General	<ul style="list-style-type: none"><li>Very toxic by inhalation. In high concentrations may cause headache, dizziness, palpitations, weakness, nausea and followed by convulsions, fainting and death.</li><li>Because it is a colourless and odourless gas, nothing will warn from its presence, except for the above symptoms.</li></ul>
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### 4. FIRST-AID MEASURES

Inhalation	<ul style="list-style-type: none"><li>If inhaled, and persons still conscious, they must be brought far from uncontaminated area and allow to breathe fresh air. Wear self-contained breathing apparatus when moving victim.</li><li>Keep victim warm and rested. Call a doctor immediately. Apply artificial respiration if breathing stopped.</li></ul>
Skin/Eye contact	<ul style="list-style-type: none"><li>No adverse effects anticipated.</li></ul>
Ingestion	<ul style="list-style-type: none"><li>Ingestion is not considered a potential route of exposure.</li></ul>

### 5. FIRE-FIGHTING MEASURES

Specific hazards	<ul style="list-style-type: none"><li>Exposure to fire may cause containers to rupture or explode.</li></ul>
Hazardous combustion products	<ul style="list-style-type: none"><li>Products of combustion are carbon oxides and nitrogen oxides.</li></ul>
Suitable extinguishing media	<ul style="list-style-type: none"><li>All known extinguishants can be used.</li></ul>
Specific methods	<ul style="list-style-type: none"><li>If possible, stop flow of product.</li><li>Move container away or cool with water from a protected position.</li></ul>

### 5. FIRE-FIGHTING MEASURES (continue)

Special protective equipment (for fire fighters)	<ul style="list-style-type: none"><li>In confined space, use a self-contained breathing apparatus.</li></ul>
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### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	<ul style="list-style-type: none"><li>Evacuate area.</li><li>Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.</li><li>Ensure adequate air ventilation.</li></ul>
Environmental precautions	<ul style="list-style-type: none"><li>Try to stop release.</li></ul>
Clean up methods	<ul style="list-style-type: none"><li>Ventilate area.</li></ul>

### 7. HANDLING & STORAGE

General	<ul style="list-style-type: none"><li>Suck back of water into the container must be prevented. Do not allow back-feed into the container.</li><li>Use only properly specified equipment, which is suitable for this product, its supply pressure and temperature.</li><li>Keep container below 50°C in a well-ventilated place.</li><li>Refer to SOXAL's booklet on "safe handling, transport and storage of compressed gas cylinder" or contact SOXAL if in doubt.</li></ul>
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### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure limit value (Carbon Monoxide, CO)	<ul style="list-style-type: none"><li>25 ppm PEL Short Term</li></ul>
Exposure limit value (Carbon Dioxide, CO <sub>2</sub> )	<ul style="list-style-type: none"><li>5,000 ppm PEL Short Term</li><li>30,000 ppm PEL Long Term</li></ul>
Engineering controls	<ul style="list-style-type: none"><li>Ventilation required when handling or using the product.</li></ul>
Personal protection	<ul style="list-style-type: none"><li>Respiratory protection required.</li><li>General PPE required.</li></ul>

### 9. PHYSICAL & CHEMICAL PROPERTIES

Molecular weight	Not applicable
Melting point	- 243°C
Boiling point	Not applicable
Critical temperature	- 147°C (Nitrogen)
Relative density, gas	0.37 (air = 1)
Relative density, liquid	Not applicable
Vapour pressure @ 20°C	Not applicable
Solubility mg/l water	Partially soluble
Appearance/Colour	Colourless gas
Odour	No odour warning properties
Auto-ignition temperature	Not applicable
Flammability range	Not flammable

For product and/or safety enquiry, please send, call, fax or log on to:

**SINGAPORE OXYGEN AIR LIQUIDE PTE LTD**  
16, Jalan Buroh, Singapore 619475.

Tel: (65) 6265 3788 or 6265 4555 Fax: (65) 6265 1441 or 6268 8403 Website: [www.soxal.com](http://www.soxal.com) Business Registration No: 197001157D

