MATERIAL SAFETY DATA SHEET

R 406A

1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION
Product Name: R/406A
Chemical Formula: Mixture containing chlorodifluoromethane, 1-chloro-1, 1-di-fluoroethane and isobutene
Company Identification: African Oxygen Limited

Emergency Phone
Tel. No: (011) 490-0400
Fax No: (011) 490-0506

2 COMPOSITION/INFORMATION ON INGREDIENTS

1-Chloro-1, 1-Difluoroethane
Concentration: 41%
CAS nr: 75-68-3
EINECS Nr: 200-891-8
Symbols: F+
Phases ®: 12.59

Chlorodifluoromethane
Concentration: 55%
CAS nr: 75-45-6
EINECS Nr: 200-871-9
Phases ®: R:59

Isobutane
Concentration: 4%
CAS nr: 75-28-5
EINECS Nr: 200-857-2
Symbols: F+
Phases ®: R:12

3 HAZARDS IDENTIFICATION

Hazards Identification

4 FIRST AID MEASURES

Inhalation
At high concentrations, risk of narcosis, cardiac arrhythmia, asphyxia by lack of oxygen. Remove the subject from contaminated area. Oxygen or cardiopulmonary resuscitation if necessary. Consult with a physician in case of respiratory and nervous symptoms.

Skin Contact

Eye Contact
Gas: none. Liquefied gas: severe eye irritation, watering, redness and swelling of eyelids, risk of burns (frostbite). Keep eyelids open to allow evaporation of product. Flush eyes with running water for several minutes, while keeping the eyelids wide open. Consult with an ophthalmologist in case of persistent pain.

Ingestion
Impossible risk (gas).

5 FIRE FIGHTING MEASURES

Specific hazards
Non-flammable (See section 9). Formation of danger in case of decomposition (see section 10). Gas/vapours combustion possible in presence of air in very particular conditions (see section 9 and/or consult the producer).

Hazardous Combustion Products
In case of fire in close proximity, all means of extinguishing is acceptable.

Extinguishing Media
Evacuate all non-essential personnel. Contact only by capable personnel who are trained and aware of the hazards of the product. If safe to do so, remove the exposed containers, or cool with large quantities of water. After the fire, ventilation and clean the rooms before re-entry.

Special protective Equipment for Fire fighters
When in close proximity or contact wear acid resistant suit. After contact proceed to clean equipment (take shower, remove clothing carefully, clean and check).

Personal precautions
Respect the protection measures given in section 5. Environmental precautions
Avoid discharge into the environment (atmosphere).

Clean up
Let the product evaporate. Prevent the product from entering sewers or confined places.

6 ACCIDENTAL RELEASE MEASURES

Evacuate all non-essential personnel. Contact only by capable personnel who are trained and aware of the hazards of the product. If safe to do so, remove the exposed containers, or cool with large quantities of water. After the fire, ventilation and clean the rooms before re-entry.
# Stability and Reactivity

**Stability**
Stable under certain conditions (see below).
Decomposition produces dangerous gases, upon contact with flames or hot metallic surfaces.

**Conditions to avoid**
Heat / sources of heat

**Materials to avoid**
Metallic powders, alkaline-earth metals, alkaline metals and their alloys.

**Hazardous decomposition**
Hydrogen Fluoride, hydrochloric acid, Phosgene, Fluophosgene

**Products**
Contact with strong bases or alkaline materials may provoke violent reactions or explosions. The vapour is heavier than air, dispersing at ground level.

**Other information**

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# Toxicological Information

**General**
LC50/1h (ppm)  LD50 (Rat) – Ingestion of 7340 mg/kg

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# Ecological Information

**General**
Product is persistent in air (atmospheric lifetime: 14 years).
Product is not significant hazardous for the aquatic environment as: Considerable volatility. No bioaccumulation.

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# Disposal Considerations

**General**
Comply with local and national regulations. Contact the producer for recycling. To avoid treatment, as far as possible, use dedicated containers.

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# Transport Information

**Road Transportation**

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<th>UN No.</th>
<th>1078</th>
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<tr>
<td>Class/Div</td>
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<td>ADR/RID Hazard No</td>
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<td>Labelling ADR</td>
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<td>Other information</td>
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# Regulatory Information

**Number in Annex**
Not dangerous according to Dir. 88/379/EEC

**EC Classification**
- Symbol
  - Labelling of cylinders Labelling “Dangerous for environment” not classified in the absence of classification criteria
  - Symbol
  - Risk phases
  - EEC Hazard Class

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# Other Information

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# Exclusion of Liability

Information contained in this publication is accurate at the date of publication. The company does not accept liability arising from the use of this information, or the use, application, adaptation or process of any products described herein.