



Material Safety Data Sheet

R-218

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Corporate MSDS Number : TAB-00132

Product Use

Refrigerant

Trade names and Synonyms

R-218

Company Identification

TABRIGAS EGYPT – PACKAGER / DISTRIBUTOR

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	Concentration %
Octafluoropropane	76-19-7	100

HAZARDS IDENTIFICATION

Hazards identification:

Liquefied gas.
In high concentrations may cause asphyxiation.

FIRST AID MEASURES

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.
Obtain medical assistance.

Ingestion:

Ingestion is not considered a potential route of exposure.

FIRE FIGHTING MEASURES

Flammable class:

Non flammable.

Specific hazards:

Exposure to fire may cause containers to rupture/explode.

Hazardous combustion products:

If involved in a fire the following toxic and/or corrosive fumes may be produced by thermal decomposition: Carbon monoxide. Hydrogen fluoride. Carbonyl fluoride.

Extinguishing media

Suitable extinguishing media : All known extinguishants can be used.

Specific methods : If possible, stop flow of product.
Move away from the container and cool with water from a protected position.

Special protective equipment for fire Fighters :

Use self-contained breathing apparatus.

ACCIDENTAL RELEASE MEASURES

Personal precautions:

Evacuate area.

Ensure adequate air ventilation.

Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

Environmental precautions:

Try to stop release.

Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.

Clean up methods:

Ventilate area.

HANDLING AND STORAGE

Storage:

Keep container below 50°C in a well ventilated place.

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.

Refer to supplier's container handling instructions.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection:

- Ensure adequate ventilation.
- Do not smoke while handling product.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20 °C	: Liquefied gas.
Color	: Colorless gas.
Odor (u)r	: Ethereal. Poor warning properties at low concentrations.
Molecular weight	: 188
Melting point [°C]	: -183
Boiling point [°C]	: -36.7
Critical temperature [°C]	: 71.9
Vapor pressure, 20°C	: 7.7 bar
Relative density, gas (air=1)	: 6.5
Relative density, liquid (water=1)	: 1.4
Solubility in water [mg/l]	: No reliable data available.
Other data	: Gas/vapor heavier than air. May accumulate in confined spaces, Particularly at or below ground level.

STABILITY AND REACTIVITY

Stability and reactivity :

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

TOXICOLOGICAL INFORMATION

Toxicity information:

- No known toxicological effects from this product.

ECOLOGICAL INFORMATION

Ecological effects information:

- No known ecological damage caused by this product.
- Not covered by the 'Montreal Protocol'.

Global warming factor [CO₂=1] : 7000

DISPOSAL CONSIDERATIONS

General:

Do not discharge into any place where its accumulation could be dangerous.

Contact supplier if guidance is required.

TRANSPORTATION INFORMATION

UN No. : 2424

H.I. nr : 20

ADR/RID

Proper shipping name : OCTAFLUOROPROPANE (REFRIGERANT GAS R 218)

ADR Class : 2

ADR/RID Classification code : 2 A

Labeling 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 containers are firmly secured.

Ensure cylinder valve is closed and not leaking.

Ensure valve outlet cap nut or plug (where provided) is correctly fitted.

Ensure valve protection device (where provided) is correctly fitted.

Ensure there is adequate ventilation.

Compliance with applicable regulations.

REGULATORY INFORMATION

EC Classification : Not included in Annex I.

Not classified as dangerous preparation/substance.

EC Labeling : No EC labeling required.

- Symbol(s) : None.

- R Phrase(s) : None.

- S Phrase(s) : None.

OTHER INFORMATION

Ensure all national/local regulations are observed.

Asphyxiate in high concentrations.

Keep container in well ventilated place.

Do not breathe the gas.

The hazard of asphyxiation is often overlooked and must be stressed during operator training.