

# SAFETY DATA SHEET

Based on Directive 91/155/EEC of the Commission of  
the European Communities

## POLYOL with TETRAFLUOROETHANE as Propellant

### 1. Identification of the substance/preparation and the company

#### 1.1 Identification of the substance or preparation:

**Synonyms :** Polyol with tetrafluoroethane as a propellant

**CAS no.** : N.A.  
**EEC index no.** : N.A.                      **NFPA code** : N.D.  
**EINECS no.** : N.A.                      **Molecular weight** : N.A.  
**RTECS no.** : N.A.                      **Formula** : N.A.

#### 1.2 Company/undertaking identification:

**Gasco**  
Division of MEBROM nv  
Assenedestraat 4  
9940 RIEME-ERTVELDE  
BELGIUM  
Phone : + 32 9 341 97 97  
Fax : + 32 9 341 97 70

#### 1.3 Telephone number for emergency:

See 1.2

### 2. Composition/information on ingredients

Hazardous ingredients	CAS no.	Conc in %	Hazard class.	Risks (R-phrases)
diethanolamine	000111-42-2	> 3	Xi	36/38
dimethylaminoethanol	000108-01-0	1	Xi	10-36/37/38
tetrafluoroethane	000811-97-2	10/30	-	-

### 3. Hazards identification

- No hazard classification

### 4. First aid measures

#### 4.1 Eye contact:

- Consult a doctor/medical service if irritation persists

#### 4.2 Skin contact:

- Consult a doctor/medical service if irritation persists

#### 4.3 After inhalation:

- Unconscious: maintain adequate airway and respiration  
- Remove the victim into fresh air  
- Consult medical service if breathing problems develop

#### 4.4 After ingestion:

- Immediately give lots of water to drink  
- Consult a doctor/medical service if you feel unwell  
- Do not allow vomiting

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## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media:

- Water
- Polyvalent foam
- BC powder
- Carbon dioxide

### 5.2 Unsuitable extinguishing media:

- No data available

### 5.3 Special exposure hazards:

- On burning : release of toxic and corrosive gases/vapours (ammonia, nitrous vapours, hydrofluoric acid, hydrogen chloride and small quantities of hydrogen cyanide)
- Heat may cause pressure rise with explosion of gas cylinders

### 5.4 Instructions:

- Cool gas cylinders with water spray/remove them into safety
- Dilute toxic gases with water spray
- Do not move the load if exposed to heat

### 5.5 Special protective equipment for firefighters:

- Heat/fire exposure: compressed air/oxygen apparatus
- Heat/fire exposure: gas-tight suit

## 6. Accidental release measures

### 6.1 Personal protection: see 8.3

### 6.2 Environmental precautions:

- Plug the leak, cut off the supply
- Dam up the liquid spill

### 6.3 Clean-up:

- Take up liquid spill into adsorbent material saw dust or vermiculite
- Scoop adsorbed substance into closing containers
- Wash clothing and equipment after handling

## 7. Handling and storage

### 7.1 Handling:

- Reduce/avoid exposure and/or contact
- Clean contaminated clothing

### 7.2 Storage:

- Meet the legal requirements
- Keep away from: heat sources

Storage temperature: 25 °C

### 7.3 Materials for packaging:

- suitable : metal
- to avoid : no data available

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## 8. Exposure controls/Personal protection

### 8.1 Recommended engineering controls:

- Work under local exhaust/ventilation

### 8.2 Exposure limits:

TLV value : N.D.

### 8.3 Personal protection:

#### eye protection:

- Face shield

#### skin protection:

- Gloves
- Protective clothing

#### materials for protective clothing:

- No data available

#### respiratory protection:

- High vapour concentration: gas mask

## 9. Physical and chemical properties

9.1 Appearance (at 20°C)	:	Liquid, under gas pressure
9.2 Odour	:	Mild
9.3 Colour	:	Light yellow to brown
9.4 pH value	:	N.D.
9.5 Boiling point/boiling range	:	N.D. °C
9.6 Melting point/melting range	:	N.D. °C
9.7 Flashpoint	:	> 93 °C
9.8 Auto-ignition point	:	N.D. °C
9.9 Explosion limits	:	N.D. vol%
9.10 Vapour pressure (at 20°C)	:	3250 hPa
9.11 Relative density (at 20°C)	:	1.2
9.12 Water solubility	:	N.D. g/100 ml
9.13 Soluble in	:	N.D.
9.14 Relative vapour density	:	N.D.
9.15 Saturation concentration	:	N.D. g/m <sup>3</sup>
9.16 Viscosity	:	N.D. Pa.s

## 10. Stability and reactivity

### 10.1 Stability:

- Stable under normal conditions

### 10.2 Reactivity:

- On burning : release of toxic and corrosive gases/vapours (ammonia, nitrous vapours, hydrofluoric acid, hydrogen chloride and small quantities of hydrogen cyanide)

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## 11. Toxicological information

### 11.1 Acute toxicity:

LD50 oral rat	: N.D.	mg/kg
LD50 dermal rat	: N.D.	mg/kg
LD50 dermal rabbit	: N.D.	mg/kg
LC50 inhalation rat	: N.D.	mg/l/4 h

### 11.2 Chronic toxicity:

EEC carc. cat.: not listed  
EEC muta. cat.: not listed  
EEC repr. cat.: not listed  
Carcinogenicity (TLV): not listed

IARC classification: not listed

11.3 Routes of exposure: swallowed, inhalation, eyes and skin

### 11.4 Acute effects/symptoms:

- Slightly irritant to skin
- Slightly irritant to respiratory organs
- Slightly irritant to eyes
- Large spills/in enclosed spaces: risk of oxygen deficiency

### 11.5 Chronic effects:

No data available

## 12. Ecological information

### 12.1 Biodegradation:

- |         |                  |        |                               |
|---------|------------------|--------|-------------------------------|
| - soil: | T <sub>1/2</sub> | : N.D. | days                          |
|         | BOD <sub>5</sub> | : N.D. | g O <sub>2</sub> /g substance |
|         | COD              | : N.D. | g O <sub>2</sub> /g substance |
- water: - Not readily biodegradable

12.2 Bioaccumulation: - log P<sub>ow</sub> : N.D.  
- BCF : N.D.

### 12.3 Aquatic toxicity:

- No data available

### 12.4 Other information:

- WGK: 1 (internal classification)
- Effect on the ozone layer : N.D.
- Waste water purification : N.D.

## 13. Waste disposal considerations

- Do not discharge into drains or the environment
- Remove to an authorized waste treatment plant

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## 14. Transport information

20
1956

- 14.1 **Substance identification number (UN number):** 1956
- 14.2 **Transport by road/rail (ADR/RID):** class 2, 1 A  
**Danger code:** 20
- 14.3 **Maritime transport (IMDG code):** class 2.2 p. 2124  
**EMS** : 2-04  
**MFAG** : 620  
**Marine pollutant:**
- 14.4 **Inland navigation (ADNR):** class 2, 1 A
- 14.5 **Air freight (ICAO):** class 2.2  
**Instruction "passenger":** 200  
**Instruction "cargo":** 200
- 14.6 **Other information:**  
UN 1956 Compressed gas, n.o.s., contains tetrafluoroethane

## 15. Regulatory information

Labelling in accordance with EC directives 67/548/EEC and 88/379/EEC  
Not Applicable

## 16. Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**N.A.** = NOT APPLICABLE

**N.D.** = NOT DETERMINED

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