



MATERIAL SAFETY DATA SHEET

IDENTITY: HFBT (HEXAFLUORO-2-BUTYNE)

SECTION I: MANUFACTURER

HALOCARBON PRODUCTS CORPORATION Emergency Number: (803) 278-3504
P.O. Box 661 Customer Service & Sales: (201) 262-8899
River Edge, N.J. 07661

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SECTION II: HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	OSHA PEL	ACGIH TLV	Other Limits
Hexafluoro-2-butyne	692-50-2	None	None	None

OSHA HAZARD RATING:

This product contains the following toxic chemical(s) subject to Section 313 Title III reporting requirements (40 CFR Part 372).

None

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point : -25C (-13F) Vapor Pressure: 105 psi (20C)
Melting Point : -117C Vapor Density(Air=1):Not available
Specific Gravity(H2O=1): Not available Solubility in Water : Insoluble

Appearance and Odor: Flammable, colorless liquified gas with faint odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: Unknown Autoignition Temp: Not determined
Flammability Limits in Air - LEL: Unknown UEL: Unknown

Extinguishing Media: Use agent appropriate for surrounding fire.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin or eyes. Thermal decomposition products are corrosive and toxic.

Unusual Fire and Explosion Hazards: Flammable high-pressure gas. Cylinders may rupture or explode under fire conditions. Remove from fire area if safe to do so. Cool container with water spray until well after fire is out. If a large release occurs, evacuate radius of 800 meters (1/2 mile). Stay upwind and keep out of low areas.



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SECTION V - REACTIVITY DATA

Unstable [] Conditions to Avoid: Protect from physical damage and
Stable [X] heat. Containers may rupture or explode if exposed to
heat.

Incompatibility (Materials to Avoid): Active metals, halogens, oxidizing
agents.

Hazardous Decomposition or By-products: Toxic fumes include carbon dioxide,
carbon monoxide & hydrogen fluoride.

Hazardous Polymerization [] May Occur [X] Will Not Occur
Conditions To Avoid: N/A

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SECTION VI - HEALTH HAZARD DATA

Highly toxic. May be harmful or fatal if inhaled. May be harmful if
swallowed or absorbed through skin. May cause skin irritation. May be
irritating to mucous membrane and upper respiratory tract. Symptoms from
inhalation may include dizziness, disorientation, narcosis, nausea or
vomiting.

Toxicity data for hexafluoro-2-butyne: Oral, in rats, LD>164 mg/kg.
(Source: RTECS). Inhalation, in rats, LC50: 81ppm, duration: 4 hrs,
(Source: RTECS). Inhalation, in mouse, LCLo: 100ppm, duration: 1 hr
(Source: RTECS).

Primary routes of entry: [X] Inhalation [X] Skin [] Eyes [] Oral

Acute Effects of Overexposure: Dizziness, disorientation, narcosis, nausea,
vomiting, possible skin irritation.

Chronic Effects of overexposure: Unknown

Carcinogenicity listing: [NO] NTP [NO] IARC [NO] OSHA
[NO] Other:

First Aid

Inhalation: Remove to fresh air and give artificial respiration if
necessary. Seek medical help.

Skin: Wash affected area immediately for 15 minutes. Remove contamin-
ated clothing and shoes. Seek medical help if needed. Clean and
dry contaminated clothing and shoes before reuse.

Eye: Flush eyes with plenty of water for at least 15 minutes. Get
immediate medical help.

Oral: Seek medical attention.

Medical Conditions Generally Aggravated by Exposure: No information avail-
able.

Other Health Hazards: No information available.



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SECTION VII - PROTECTION INFORMATION

Respiratory: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Wear self-contained breathing apparatus for emergency use.

Ventilation: Provide explosion proof exhaust ventilation system. Ensure compliance with applicable exposure limits.

Eye and Face: Safety glasses or goggles.

Gloves: Wear appropriate chemical resistant gloves.

Other equipment: Safety shoes are recommended for those working with cylinders.

Storage: Store cylinder in a cool, dry area. Cylinder temperature should not exceed 52C. Use with equipment rated for cylinder pressure and of compatible materials of construction.

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SECTION VIII - SPILL, LEAK AND DISPOSAL PROCEDURES

Spill, Leak, or Release: Wear self-contained breathing apparatus to shut off leak at source if safe to do so. Evacuate area, avoid breathing vapors and keep personnel upwind.

Waste Disposal: Dispose in accordance with all federal, state and local regulations.

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SECTION IX - OTHER INFORMATION

1. Hazardous Materials/Dangerous Goods Shipping Regulations

U.S. (49 CFR): Proper Shipping Name: Compressed gas, toxic, flammable, N.O.S., (Hexafluorobutylene), poison-inhalation hazard, Zone A
Hazard Class 2.3/2.1 I.D. NO.: UN 1953
Packaging Group: N/A

IMDG: Proper Shipping Name: Compressed gas, toxic, flammable, N.O.S., (Hexafluorobutylene), poison-inhalation hazard, Zone A
Hazard Class 2.3/2.1 I.D. NO.: UN 1953
Packaging Group: N/A

IATA: Forbidden

Other Information: HMIS Labeling: H 3; F 4*; R 1; P G

* This material is known to be flammable, but the degree of flammability has not been determined.

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