



Safety Data Sheet

HEXAFLUOROETHANE (R-116)

www.advancedspecialtygases.com

Section 1: Product and Company Identification

Advanced Specialty Gases
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Product Code: HEXAFLUOROETHANE (R-116)

Section 2: Hazards Identification



Warning

Hazard Classification:

Gases Under Pressure

Hazard Statements:

Contains gas under pressure; may explode if heated

Precautionary Statements

Storage:

Protect from sunlight.
Store in well-ventilated place.

Section 3: Composition/Information on Ingredients

CAS #
76-16-4

Chemical Substance	Chemical Family	Trade Names
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HEXAFLUOROETHANE (R-116)		CFC-116 Perfluoroethane

Section 4: First Aid Measures

Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
Wash with plenty of water and soap.	Flush with plenty of water	Never give anything by mouth to an unconscious person. rinse mouth with water. consult a physician.	Move to fresh air. If not breathing, give artificial respiration. Consult physician.	Not available

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.	Carbon oxides, hydrogen fluoride	<ul style="list-style-type: none"> ▪ Not available ▪ Not available ▪ Not available ▪ Wear self-contained breathing apparatus for firefighting

Section 6: Accidental Release Measures

Personal Precautions	Environmental Precautions	Methods for Containment
Avoid breathing vapors, mist or gas. Have adequate ventilation. Evacuate people from area.	Do not let product enter drain	Clean up promptly by sweeping or vacuum.

Methods for Cleanup	Other Information
Clean up promptly by sweeping or vacuum.	Not available

Section 7: Handling and Storage

Handling	Storage
Keep container closed, dry, and in a well-ventilated place.	Normal measures for preventive fire protection

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines
None

Engineering Controls

No specific controls are needed.

Eye Protection	Skin Protection	Respiratory Protection
Use proper eye protection	Impervious clothing	Not available

General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

Physical State	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
Liquefied gas	Colorless	Colorless	N/a	Gas	Slight ethereal	N/a

Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
Not available	Not available	Not available	Not available	None	None

Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
-78 deg C (-108 deg F)	Not available	22.231 mm hg at 70F	4.8 (Air=1)	Not available	Not available	Not available	Not available	Not available	Not available

Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
138.01 g/mol	C2F6	Not available	Not available	Not available	100%	Not available

Section 10: Stability and Reactivity

Stability	Conditions to Avoid	Incompatible Materials
Stable under recommended storage conditions	Stable under recommended storage conditions	Incompatible with alkali or alkaline earth metals- powdered Al, Zn, Be, etc.

Hazardous Decomposition Products	Possibility of Hazardous Reactions
Products formed under fire conditions: carbon oxides, hydrogen fluoride	Will not occur

Section 11: Toxicology Information

Acute Effects

Oral LD50	Dermal LD50	Inhalation
Not available	Not available	May be harmful if inhaled. may cause respiratory tract irritation.

Eye Irritation	Skin Irritation	Sensitization
Can cause eye irritation	May be harmful if absorbed through skin. may cause irritation.	Avoid inhalation of vapors, can cause heart irregularities, unconsciousness, or death. Liquid contact can cause frostbite. Vapor reduces available oxygen.

Chronic Effects

Carcinogenicity	Mutagenicity	Reproductive Effects	Developmental Effects
IARC: no component present at levels greater than or equal to .1% is identified as human carcinogen by IARC	Not available	Not available	No data

Section 12: Ecological Information

Fate and Transport

Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Fish toxicity: not available Invertebrate toxicity: not available Algal toxicity: not available Phyto toxicity: not available Other toxicity: not available	Not available	Not available	Not available

Section 13: Disposal Considerations

Comply with federal, state, and local regulations

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requirements	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
Hexafluoroethane	UN2193	2.2	Not available	Nonflammable gas	Not available	Not available	Not available

Canadian Transportation of Dangerous Goods

Shipping Name	UN Number	Class	Packing Group / Risk Group
Hexfluoroethane	Un2193	2.2	Not available

Section 15: Regulatory Information

U.S. Regulations

CERCLA Sections	SARA 355.30	SARA 355.40
Not available	Not available	Not available

SARA 370.21

Acute	Chronic	Fire	Reactive	Sudden Release
Yes	No	No	No	Yes

SARA 372.65

Not available

OSHA Process Safety

Not available

State Regulations

CA Proposition 65
Not available

Canadian Regulations

WHMIS Classification
Not available

National Inventory Status

US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
Listed	Not available	Not available

Section 16: Other Information

NFPA Rating
Health:1, flammability-0, reactivity-1

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard