Dibromofluoromethane Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DIBROMODIFLUOROMETHANE

CAS number: 75-61-6

Product code: VCDBDFM

Use / description of product: Feedstock

Company name: Valliscor LLC, 1110, NE Circle Blvd., Bldg. 11, Corvallis, OR 97330, USA
Telephone: (+1)-541-286-5082
Emergency Phone: (+1)-541-286-8436

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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : CBr2F2
Molecular Weight : 209.82 g/mol
CAS-No. : 75-61-6

Component	Classification	Concentration
Dibromodifluoromethane		
		<= 100%

For the full text of the H-Statements mentioned in this Section, see Section 16.

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4. FIRST AID MEASURES

4.1 Description of first aid measures
General advice

Move out of dangerous area

If Inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration/CPR.

In case of skin contact
Wash off with soap and plenty of water

In case of eye contact
Flush eyes with water as a precaution

If swallowed
Never give anything by mouth to an unconscious person. Rise mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
no data available

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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
No data available

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information
no data available

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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

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7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Handle and open container with care.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Basis
Dibromodifluoromethane	75-61-6	TWA	100 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Central Nervous System impairment Upper Respiratory Tract irritation Liver damage		
		TWA	100 ppm or 860 mg/m3	USA. Occupational exposure limits (OSHA) – Table Z-1 Limits for Air Contaminants

		The value in mg/m3 is approximate.		
		TWA	100 ppm or 860 mg/m3	USA. NIOSH Recommended Exposure Limits
		PEL	100 ppm or 860 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment
Eye/face protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Complete suit protecting against chemicals – impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respirtory protection no required. For nuisance exposures use type OV/AG (US) or type AXBEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter drains.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form:	liquid, colorless
b) Odor:	no data available

c) Odor Threshold:	no data available
d) pH:	no data available
e) Melting point/freezing point:	Melting point/range: -142 to -141 °C (-224 to -222 °F)
f) Initial boiling point and boiling range:	22-23 °C (72-73 °F)
g) Flash point:	no data available
h) Evaporation rate:	no data available
i) Flammability (solid, gas):	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure:	881.585 hPa (661.243 mm Hg) at 20 °C (68 °F) 2,721.954 hPa (2,041.633 mm Hg) at 55 °C (131 °F)
l) Vapor density:	8.41
m) Relative density:	2.297 g/mL at 25 °C (77 °F)
n) Water solubility:	no data available
o) Partition coefficient n-octanol/water:	no data available
p) Auto-ignition temperature:	no data available
q) Decomposition temperature:	no data available
r) Viscosity:	no data available
s) Explosive properties:	no data available
t) Oxidizing properties:	no data available

9.2 Other safety information

Relative vapor density	8.41

10. STABILITY AND REACTIVITY

10.1 Reactivity
no data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
no data available

10.5 Incompatible materials
zinc, sodium/sodium oxides, potassium, alumnium

10.6 Hazardous decomposition products
Hazardous descomposition products under fire conditions – carbon oxides, hydrogen bromide gas, hydrogen fluoride
Other decomposition products – No data available
In the event of fire: see section 5

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11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LC50 Inhalation – Mouse – 2 hr – 140,000 mg/m3
Remarks: Behavioral: Rigidity (includes catalepsy). Liver: Other changes. Kidney, Ureter, Bladder: Other Changes.
Dermal: no data available
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
no data available
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information

RTECS: PA7525000

Lung irritation, chest pain, pulmonary edema, liver injury may occur. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach – Irregularities – Based on Human Evidence

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12. ECOLOGICAL INFORMATION

12.1 Toxicity
no data available

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

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13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 1941 Class: NONE Packing group: III
Proper shipping name: Dibromodifluoromethane
Reportable Quantity (RQ):

Poison Inhalation Hazard: Nor

IMDG
UN number: 1941 Class: 9 Packing group: III EMS-No: F-A, S-A
Proper shipping name: Dibromodifluoromethane

IATA
UN number: 1941 Class: NONE Packing group: III
Proper shipping name: Dibromodifluoromethane

15. REGULATORY INFORMATION

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
Dibromofluoromethane (CAS-No: 75-61-6, Revision Date 1993-04-24)

Pennsylvania Right To Know Components
Dibromofluoromethane (CAS-No: 75-61-6, Revision Date 1993-04-24)

New Jersey Right To Know Components
Dibromofluoromethane (CAS-No: 75-61-6, Revision Date 1993-04-24)

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.
Acute Tox. Acute toxicity
H302 Harmful if swallowed.

HMIS Rating
Health hazard: 0
Chronic Health Hazard: *
Flammability: 0
Physical Hazard 0

NFPA Rating
Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0