


Graphite, Fluorinated, Polymer		Pricing >
Linear Formula	$(CF_x)_n$	
Pubchem CID	6365488	
MDL Number	MFCD00135559	
EC No.	257-131-3	
IUPAC Name	carbon; fluoride	
SMILES	[C].[F-]	
Inchl Identifier	InChI=1S/C.FH/h;1H/p-1	
Inchl Key	NJCQVAKYBOCUCS-UHFFFAOYSA-M	
Signal Word	Warning	
Hazard Statements	H315-H319-H335	
Hazard Codes	Xi	
Precautionary Statements	P261-P305 + P351 + P338	
Flash Point	Not applicable	
Risk Codes	36/37/38	
Safety Statements	26	
RTECS Number	N/A	
Transport Information	NONH for all modes of transport	
WGK Germany	3	
GHS Pictograms	<u>GHS07</u> <u>Exclamation</u> <u>Point</u> 	

[Create Printable PDF](#)

SAFETY DATA SHEET

Date Accessed: 04/26/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #51311-17-2

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Skin irritation (Category 2) Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)



Signal word Warning
Hazard statement(s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
Precautionary statement(s)
P261 Avoid breathing dust. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name : Graphite Fluoride (Carbon
Monofluoride)
CAS-No : 51311-17-2
EC-No : 257-131-3

SECTION 4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to
the doctor in attendance. Move out of
dangerous area.

If inhaled

If breathed in, move person into fresh air. If not
breathing, give artificial respiration. Consult a
physician.

In case of skin contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious
person. Rinse mouth with water. Consult a
physician.

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.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

Nature of decomposition products not known

Advice for firefighters

Wear self-contained breathing apparatus for
firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and
emergency procedures

Use personal protective equipment. Avoid dust
formation. Avoid breathing vapours, mist or
gas. Ensure adequate ventilation. Evacuate personnel
to safe areas. Avoid breathing dust.

For personal protection see section 8.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust.
Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Suitable extinguishing media
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Normal measures for preventive fire protection. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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
Safety glasses with side-shields conforming to EN166
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
Impervious clothing recommended. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form: Powder

Colour: Grey / White

Odour Odourless

Odour Threshold No data available

pH No data available

Melting point/freezing point No data available

Initial boiling point and boiling range No data available

Flash point Not applicable

Evaporation rate No data available

Flammability (solid, gas) No data available

Upper/lower flammability or explosive limits
No data available

Vapour pressure No data available

Vapour density No data available

Relative density No data available

Water solubility Insoluble

Partition coefficient: n- octanol/water No data
available

Auto-ignition temperature No data available

Decomposition temperature No data available

Viscosity No data available

Explosive properties No data available

Oxidizing properties No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

No data available

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products
Other decomposition products - No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - mouse - 4.000 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

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.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

See section 11

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL

CONSIDERATIONS

Product:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging:

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: IMDG: - IATA: -

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precaution for user

No data available

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

Chemical Safety Assessment

No data available

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of

invoice or packing slip for additional terms and
conditions of sale. COPYRIGHT 1997-2022
AMERICAN ELEMENTS. LICENSED GRANTED TO
MAKE UNLIMITED PAPER COPIES FOR INTERNAL
USE ONLY.
