

CENTRAL GLASS Co., Ltd.

Issued: July 20, 1993
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Safety Data Sheet

1. Identification

Product name: CEFBON
Product code: UPF-3301U
General Use: Solid lubricant
Product Description: No information
SDS No.: UPF-3301U
Manufacturer
Company Name: Central Glass Co., Ltd.
Address: Kowa Hitotsubashi Bldg., 3-7-1 Kanda Nishikicho, Chiyoda-ku,
Tokyo 101-0054, Japan
Section concerned: Electronic Materials Sales Department
Person in charge: General Manager, Electronic Materials Sales Department
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2. Hazard identification

GHS classification

Not classified

Other hazards¹⁾

Similar to polytetrafluoroethylene. Heating in excess of 300°C generate hazardous gases such as hydrogen fluoride and carbon monoxide. Material with a low content of fluorine may exist and may contain very small amounts of HF attached.

3. Composition, information on ingredients

Substance/mixture: Substance
Chemical name: Graphite Fluoride
Synonym: No information
Chemical Formula: (CF_x)_n
CAS No.: 51311-17-2

4. First-aid measures²⁾

Inhalation: Move the subject into fresh air and get medical aid.
Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes.
Skin contact: Immediately flush skin with large amounts of water.
Ingestion: Gargle with water and get medical aid.
Protection of first-aiders: Use appropriate protection (see section 8).
Immediate medical advice: Not applicable.

5. Fire-fighting measures

Flammable properties: No information.

Extinguishing media suitable:

Water, carbon dioxide, dry sand, and foam of alcohol are effective.

Special fire-fighting procedures:

Intense heat generated by the fire in the surrounding area can cause decomposition and hazardous gas generation. Spray water to cool.

Special protection of fire-fighters:

Fire-fighter should wear self-contained breathing apparatus.

Refer to (8. Exposure control, personal protections).

6. Accidental release measures

Personal precautions: Do not inhale the dust. Use appropriate protection (see section 8).

Environmental precautions: No information.

Methods for cleaning up: Ventilate area.
Sweep up spilled material and collect in plastic containers etc., taking care not to scatter the powder. Wash the area with plenty of water.

7. Handling and storage

Handling: Wear suitable protective equipment to prevent inhalation, contact, etc. Wash face, hands, mouth, etc. after handling. Pay particular attention to forced draughts or ventilation. Handle containers carefully to prevent breakage.

Storage: Store the containers sealed, away from elevated temperature and humidity, and don't above the ground.

Packaging materials Suitable: Polyethylene, polypropylene.

8. Exposure control / personal protections

Exposure limits: Japan Society for Occupational Health; Not applicable³⁾
TLV by ACGIH; Not applicable⁴⁾

Engineering control: Ventilation and wash facilities should be provided at the workplace.

Personal protection:

Respiratory protection: Wear a dust protective mask

Hand protection: Wear rubber gloves.

Eye protection: Wear protective glasses or goggles.

Skin protection: Wear protective clothing.

Environmental exposure control: No information

9. Physical and chemical properties

Appearance: White powder (from gray to black with low content of fluorine)

Odour: No information

Odour threshold: No information

pH: No information

Melting point/freezing point: Not applicable

Initial Boiling point and boiling range: Not applicable

Flash point: No information

Evaporation rate: No information

Flammability(solid, gas): Not applicable

Upper/lower Flammability or explosive limits: Not applicable

Vapor pressure:	Not applicable
Vapor density:	Not applicable
Relative density:	2.5-2.7
Solubility(ies):	No information
Partition coefficient:n-octanol/water:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	300°C
Viscosity:	No information
Bulk density:	0.1-0.7

10. Stability and reactivity

Conditions to avoid:	Will react with oxidizers.
Stability/reactivity:	Stable under normal handling conditions. However, decomposes when heated to more than 300°C. In case of continual usage, it is preferable to maintain the temperature below 200°C. Combination with alkali metals, hot concentrated sulfuric acid, hot concentrated nitric acid, strong oxidizing agents, strong reductive agents and basic organic solvents cause decomposition even at temperatures below 200°C, and therefore should be avoided. Exposure to ultraviolet light in a polar solvent atmosphere cause gradual decomposition even at room temperature. ⁵⁾

Materials to avoid:	Don't contact with oxidizing agents.
Hazardous reaction/decomposition products:	Thermal decomposition produce toxic gases such as hydrogen fluoride and carbon monoxide at temperatures above 300°C.

11. Toxicological information

Acute toxicity:	No phenomenon (symptoms, etc.) depending on toxicity was observed through oral ingestion (4 g/kg, mouse). ¹⁾
Eye irritation:	No information
Skin irritation:	No information
Sensitization:	No information
Repeated dose toxicity:	No information
Chronic toxicity:	No information
Mutagenicity:	No information
Carcinogenicity:	No information
Reproductive and developmental toxicity:	No information
Others:	Avoid skin contact and inhalation. Material with a low content of fluorine may exist and may contain very small amounts of HF attached.

12. Ecological information

Ecotoxicity(aquatic acid terrestrial, where available):	No information
Persistence and degradability:	No information
Bioaccumulative potential:	No information
Mobility in soil:	No information
Other adverse effects:	No information

13. Disposal considerations

Disposal of product: Mix with combustible solvents and incinerate in a furnace equipped with afterburner and scrubber. Neutralize the exhaust gas generated during incineration.

Disposal of packaging: Not applicable.

14. Transport information

UN Number: Not applicable
Proper shipping name: Not applicable
UN Classification: Not applicable
UN Packing Group: Not applicable
Special Precautions: Not applicable
Follow all regulations in your country.

15. Regulatory information

Not applicable
Follow all regulations in your country.

16. Other information

Literature cited:

- 1) Y. Yoshida, A. Harada, T. Okamura, K. Kono, M. Watanabe, S. Toyota, and K. Iwasaki, Bull. Osaka Medical School, 23, 14-32 (1977)
- 2) The Sigma Aldrich Library of Chemical Safety Data EDITION II Vol.2, edited by Robert E. Lenga (1988)
- 3) Recommendation of Occupational Exposure Limits (2012), Japan Society for Occupational Health
- 4) ACGIH (for 2012, Japan Association for Working Environment Measurement Corporation
- 5) N. Watanabe and K. Ueno, Bull. Chem. Soc. Jpn., 53, 388-390 (1980)

Corporation

- The contents and other physical and chemical properties shown in this SDS do not imply any guarantee.
- Precautions and other descriptions in this MSDS are for normal handling. Special considerations may be required for particular operations.
- Hazard information in this MSDS is not exhaustive. Other related documents and information should be consulted before using the product.