CENTRAL GLASS Co., Ltd.

Issued: March 6, 2014
Revised: October,10 2018

Safety Data Sheet

1. Identification

Product name: CEFBON CMA
Product code: UPF-3301
Other means: —
Recommended use: Solid lubricant
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
Phone: 81-3-3259-7267
Fax: 81-3-3259-7363
Emergency Phone: 81-3-3259-7267 （at Monday-Friday 9:00 a.m.-5:30 p.m.）

2. Hazards identification

Classification of the substance or mixture:
Classification: Not Classification.
GHS label elements, including precautionary statements
Symbol: Not applicable
Signal word: Not applicable
Hazard statement: Not applicable
Precautionary statements: Not applicable
Other hazards which do not result in classification:
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 or mixture: Substance
Chemical name: Graphite Fluoride
Synonym: No information
Content: 99% or more
Chemical Formula: $(CF_X)_n$
CAS No. : 51311-17-2
TSCA inventory: Registered
EINECS/ELINCS: 257-131-3

4. First-aid measures

Description of necessary first-aid measures
Inhalation: Move person into fresh air. If not breathing, give artifical respiration. If breathing is difficult, give oxygen inhalations.

Eye contact: Flush eyes with clean water for at least 15 minutes.
Widely open eyelids with fingers when washing so that flowing water thoroughly washes eyeballs.
Be sure to seek medical attention.

Skin contact: Flush skin with plenty of clean water for at least 15 minutes and seek medical attention.
When clothing is contaminated, wash the contaminated part with plenty of clean water to avoid secondary contact, remove the clothing, flush skin with plenty of clean water for at least 15 minutes, and seek medical attention.

Ingestion: Gargle with water and seek medical attention.

Most important symptoms /effects, acute and delayed
: Not applicable.

Indication of immediate medical attention and special treatment needed, if necessary
: Not applicable.

5. Fire-fighting measures

Suitable extinguishing media: Water, carbon dioxide, dry sand, and foam of alcohol are effective.

Specific hazards arising from the chemical:
Intense heat generated by the fire in the surrounding area can cause decomposition and hazardous gas generation. Spray water to cool.

Special protective actions for fire-fighters:
Wear protective equipment as described in section 8.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Do not inhale the dust. Use appropriate protection (see section 8).

Environmental precautions: Not applicable.

Methods and materials for containment and cleaning up:
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

Precautions for safe 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.

Conditions for safe storage, including any incompatibilities:
Store the containers sealed, away from elevated temperature and humidity, and don't above the ground.

8. Exposure controls/personal protection

Control parameters: Not set up

Appropriate engineering controls:
Ventilation and wash facilities should be provided at the workplace.

Individual protection measures, such as personal protective equipment (PPE):
Eye/face protection: Chemical goggles

Skin protection: Chemical-resistant protective clothing
Respiratory protection: dust protective mask
Thermal hazards: No information.

9. Physical and chemical properties

Appearance (physical state, colour, etc):	White powder (from gray to black with low content of fluorine)
Odour:	None
Odour threeshold:	Not applicable
pH:	Not applicable
Melting point/freezing point:	No information
Initial Boiling point and boiling range:	No information
Flash point:	Not applicable
Evaporation rate:	No information
Flammability(solid, gas):	Not applicable
Upper/lower Flammability or explosive limits:	Not applicable
Vapor pressure:	No information
Vapor density:	No information
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℃
Viscosity:	No information
Bulk density:	0.1-0.7

10. Stability and reactivity

Reactivity:	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℃
Chemical stability:	Stable under normal handling conditions.
Possibility of hazardous reactions:	Thermal decomposition produce toxic gases such as hydrogen fluoride and carbon monoxide at temperatures above 300℃
Conditions to avoid:	Do not heat above 300℃. Exposure to ultraviolet light in a polar solvent atmosphere
Incompatible materials:	Not applicable.
Hazardous decomposition products:	Hydrogen fluoride, etc.

11. Toxicological information

Acute toxicity:	No phenomenon (symptoms, etc.) depending on toxicity was observed through oral ingestion (4 g/kg, mouse). [1)]
Skin corrosion/irritation:	No information
Serious eye damage/eye irritation:	No information
Respiratory or skin sensitization:	No information
Germ cell mutagenicity:	No information
Carcinogenicity:	No information

Reproductive toxicity:	No information
STOT - single exposure:	No information
STOT - repeated exposure:	No information
Aspiration hazard:	No information
Other information:	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

Toxicity:	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 methods

Product:	Mix with combustible solvents and incinerate in a furnace equipped with afterburner and scrubber. Neutralize the exhaust gas generated during incineration.
Packing:	Remove contents completely. After the contents are completely removed, the used containers are appropriately disposed of according to relevant laws and local government standards.

14. Transport information

UN number:	Not applicable
UN proper Shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group if applicable:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	No information

Transport in bulk according to Annex Ⅱ of MARPOL 73/78 and the IBC Code:
Not applicable

Follow all regulation in your country.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:
Not applicable

Follow all regulation in your country.

16. Other information

Attentions

- We make no warranties regarding the contents shown in this SDS. Users will indemnify

and hold harmless us against all actions, claims, damages, costs and expenses resulting from and/or in connection with using the contents shown in this SDS.

- The contents shown in this SDS are for normal handling.
- Special considerations may be required for particular operations.
- The contents shown in this SDS are not exhaustive. Other related documents and information should be consulted before using the product.

Revision History