

# SAFETY DATA SHEET



## Capstone™ FS-81

Version	Revision Date:	SDS Number:	Date of last issue: 24.04.2023
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### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Capstone™ FS-81

SDS-Identcode : 130000042934

#### Manufacturer or supplier's details

Company name of supplier : The Chemours Company FC, LLC

Address : 1007 Market Street  
Wilmington, DE 19801 United States of America (USA)

Telephone : 55 5125 4907 in D.F. and metropolitan area - 800 737 5623  
inside the Republic.

Emergency telephone : (ANIQ - SETIQ) 55 5559 1588 in CDMX and metropolitan  
area; 800 002 1400 inside the Republic.

E-mail address : Infolatam@chemours.com

#### Recommended use of the chemical and restrictions on use

Recommended use : Additive

Restrictions on use : For industrial use only.  
Do not use or resell Chemours™ materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information, please contact your Chemours representative.

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### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin sensitization : Category 1

#### GHS label elements

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

Precautionary Statements : **Prevention:**  
P261 Avoid breathing mist or vapors.  
P272 Contaminated work clothing should not be allowed out of

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the workplace.  
P280 Wear protective gloves.

### Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/  
attention.  
P362 + P364 Take off contaminated clothing and wash it before  
reuse.

### Disposal:

P501 Dispose of contents/ container to an approved waste dis-  
posal plant.

### Other hazards

Inhalation of decomposition products in high concentration may cause shortness of breath (lung edema).

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9	>= 0.0015 -< 0.06

### Alternative CAS Numbers for some regions

Chemical name	Alternative CAS Number(s)
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	2682-20-4, 26172-55-4

## SECTION 4. FIRST AID MEASURES

General advice	: In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	: If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	: In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	: Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

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- |   |   |  |
|---|---|--|
| If swallowed  | : | If swallowed, DO NOT induce vomiting.<br>Get medical attention if symptoms occur.<br>Rinse mouth thoroughly with water.  |
| Most important symptoms and effects, both acute and delayed | : | Inhalation may provoke the following symptoms:<br>Lung edema<br>Discomfort<br>Irritation<br>Lachrymation<br>Redness<br>Shortness of breath<br>Eye contact may provoke the following symptoms<br>tearing<br>Redness<br>Discomfort<br>May cause an allergic skin reaction. |
| Protection of first-aiders                                  | : | First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).  |
| Notes to physician  | : | Treat symptomatically and supportively.  |
- 

### SECTION 5. FIRE-FIGHTING MEASURES

- |  |   |   |
|--|---|---|
| Suitable extinguishing media                   | : | Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry chemical  |
| Unsuitable extinguishing media                 | : | None known.   |
| Specific hazards during fire fighting          | : | Vapors may form explosive mixtures with air.<br>Exposure to combustion products may be a hazard to health.  |
| Hazardous combustion products                  | : | Hydrogen fluoride<br>carbonyl fluoride<br>potentially toxic fluorinated compounds<br>aerosolized particulates<br>Carbon oxides  |
| Specific extinguishing methods                 | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |
| Special protective equipment for fire-fighters | : | In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment.  |

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### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g., by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### SECTION 7. HANDLING AND STORAGE

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Do not get on skin or clothing.  
Avoid breathing mist or vapors.  
Do not swallow.  
Avoid contact with eyes.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Take care to prevent spills, waste and minimize release to the environment.  
  
Do not breathe decomposition products.
- Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.  
When using do not eat, drink or smoke.  
Contaminated work clothing should not be allowed out of the workplace.  
Wash contaminated clothing before re-use.

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Conditions for safe storage : Keep in properly labeled containers.  
Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents  
Gases

Recommended storage temperature : 5 - 40 °C

Further information on storage stability : Stable under normal conditions.

Do not freeze.

Perishable if frozen.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

#### Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Hydrogen fluoride	7664-39-3	VLE-PPT	0.5 ppm (Fluorine)	NOM-010-STPS-2014
		VLE-P	2 ppm (Fluorine)	NOM-010-STPS-2014
		TWA	0.5 ppm (Fluorine)	ACGIH
		C	2 ppm (Fluorine)	ACGIH
Carbonyl difluoride	353-50-4	VLE-PPT	2 ppm	NOM-010-STPS-2014
		VLE-CT	5 ppm	NOM-010-STPS-2014
		TWA	2 ppm	ACGIH
		STEL	5 ppm	ACGIH
Carbon dioxide	124-38-9	VLE-PPT	5,000 ppm	NOM-010-STPS-2014
		VLE-CT	30,000 ppm	NOM-010-STPS-2014
		TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
Carbon monoxide	630-08-0	VLE-PPT	25 ppm	NOM-010-STPS-2014
		TWA	25 ppm	ACGIH

Engineering measures : Processing may form hazardous compounds (see section 10).

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Ensure adequate ventilation, especially in confined areas.  
Minimize workplace exposure concentrations.

### Personal protective equipment

- Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
- Filter type : Combined particulates and acidic gas/vapor type
- Hand protection  
Material : Viton®
- Remarks : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!
- Eye protection : Wear the following personal protective equipment:  
Safety glasses
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : light yellow
- Odor : slight
- Odor Threshold : No data available
- pH : 5.5 - 7.0
- Melting point/freezing point : 0 °C
- Initial boiling point and boiling range : No data available

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Flash point	:	> 93 °C
		Method: Pensky-Martens closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	1.1
Solubility(ies)		
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	> 200 °C
Viscosity		
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Particle size	:	Not applicable

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Vapors may form explosive mixture with air. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.

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Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

### Hazardous decomposition products

Thermal decomposition : Hydrogen fluoride  
Carbonyl difluoride  
Carbon dioxide  
Carbon monoxide

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation  
Skin contact  
Ingestion  
Eye contact

### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 1.36 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

#### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Acute oral toxicity : LD50 (Rat): 64 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.171 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit): 87.12 mg/kg

### Skin corrosion/irritation

Not classified based on available information.

#### Product:

Species : Rabbit  
Result : No skin irritation  
Remarks : Based on data from similar materials



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### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Species	: Rabbit
Method	: OECD Test Guideline 404
Result	: Corrosive after 1 to 4 hours of exposure

### **Serious eye damage/eye irritation**

Not classified based on available information.

### Product:

Species	: Rabbit
Result	: No eye irritation
Remarks	: Based on data from similar materials

### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Result	: Irreversible effects on the eye
Remarks	: Based on skin corrosivity.

### **Respiratory or skin sensitization**

#### **Skin sensitization**

May cause an allergic skin reaction.

#### **Respiratory sensitization**

Not classified based on available information.

### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Test Type	: Buehler Test
Routes of exposure	: Skin contact
Species	: Guinea pig
Result	: positive

Assessment	: Probability or evidence of high skin sensitization rate in humans
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### **Germ cell mutagenicity**

Not classified based on available information.

### **Carcinogenicity**

Not classified based on available information.

### **Reproductive toxicity**

Not classified based on available information.

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### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

### Aspiration toxicity

Not classified based on available information.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Product:

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): > 120 mg/l  
Exposure time: 48 h

#### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.19 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.16 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Skeletonema costatum (marine diatom)): 0.0052 mg/l  
Exposure time: 48 h

NOEC (Skeletonema costatum (marine diatom)): 0.00049 mg/l  
Exposure time: 48 h

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.02 mg/l  
Exposure time: 36 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.10 mg/l  
Exposure time: 21 d

### Persistence and degradability

#### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 62 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

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### Bioaccumulative potential

#### Components:

**Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):**

Partition coefficient: n- : log Pow: < 1  
octanol/water

### Mobility in soil

No data available

### Other adverse effects

No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

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## SECTION 14. TRANSPORT INFORMATION

### International Regulations

#### **UNRTDG**

Not regulated as a dangerous good

#### **IATA-DGR**

Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### Domestic regulation

#### **NOM-002-SCT**

Not regulated as a dangerous good

### Special precautions for user

Not applicable

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## SECTION 15. REGULATORY INFORMATION

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

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Federal Law for the control of chemical precursors, essential chemical products and machinery for producing capsules, tablets and pills. : Not applicable

### SECTION 16. OTHER INFORMATION

Revision Date : 01.11.2023

Date format : dd.mm.yyyy

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Before use read Chemours safety information.

For further information contact the local Chemours office or nominated distributors.

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
NOM-010-STPS-2014 : Mexico. Norm NOM-010-STPS-2014 on Chemicals Polluting the Work Environment - Identification, Assessment and Control - Appendix 1 Occupational Exposure Limits  
  
ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / STEL : Short-term exposure limit  
ACGIH / C : Ceiling limit  
NOM-010-STPS-2014 / VLE- : Time weighted average limit value  
PPT  
NOM-010-STPS-2014 / VLE- : Short term exposure limit value  
CT  
NOM-010-STPS-2014 / VLE- : Ceiling value  
P

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-

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lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

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