

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Chrome III Oxide Catalyst Sample

Version 3.0      Revision Date: 2025/10/28      SDS Number: 11514757-00003      Date of last issue: 2025/05/30  
Date of first issue: 2025/02/27

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Chrome III Oxide Catalyst Sample

SDS-Identcode : 130000122479

#### Manufacturer or supplier's details

Company : The Chemours Chemical (Shanghai) Co., Ltd.

Address : 9F, SCG Parkside, 868 Yinghua Road, Pudong New District  
201204, Shanghai, China

Telephone : 86 400 8056 528

Emergency telephone number : 86 532 8388 9090

E-mail address : SDS.ChinaPSR@chemours.com

Telefax : 86 21 2612 0862

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

Recommended use : sample

Restrictions on use : For industrial use only.

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

**Appearance** : solid  
**Colour** : green, black  
**Odour** : none

Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

#### GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Dermal) : Category 3

Skin corrosion/irritation : Category 1

Serious eye damage/eye irritation : Category 1

Skin sensitisation : Category 1

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Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

### GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H400 Very toxic to aquatic life.  
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

### Response:

P301 + P330 + P331 + P316 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get emergency medical help immediately.  
P302 + P361 + P354 + P316 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Get emergency medical help immediately.  
P304 + P340 + P316 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately.  
P305 + P354 + P338 + P316 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get emergency medical help immediately.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P333 + P317 If skin irritation or rash occurs: Get medical help.  
P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.  
P391 Collect spillage.



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### Storage:

P405 Store locked up.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Physical and chemical hazards

Not classified based on available information.

### Health hazards

Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage. May cause an allergic skin reaction.

### Environmental hazards

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

### Other hazards which do not result in classification

|| Corrosive to the respiratory tract.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

| Chemical name        | CAS-No.   | Concentration (% w/w) |
|----------------------|-----------|-----------------------|
| Chromium oxide       | 1308-38-9 | $\geq 50$ -< 70       |
| Chromium trifluoride | 7788-97-8 | $\geq 30$ -< 50       |
| Carbon               | 7440-44-0 | $\geq 1$ -< 10        |
| Hydrofluoric acid    | 7664-39-3 | $\geq 0.25$ -< 1      |

## 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.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Get medical attention immediately.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Get medical attention immediately.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.



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- If easy to do, remove contact lens, if worn.  
Get medical attention immediately.
- If swallowed : If swallowed, DO NOT induce vomiting.  
If vomiting occurs have person lean forward.  
Call a physician or poison control centre immediately.  
Rinse mouth thoroughly with water.  
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : Harmful if swallowed.  
Toxic in contact with skin.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Causes severe burns.  
Causes digestive tract burns.  
Corrosive to respiratory system.
- 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.

### 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : None known.
- Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Chromium compounds  
Fluorine compounds  
Metal oxides  
Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment : In the event of fire, wear self-contained breathing apparatus.



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for firefighters

Use personal protective equipment.

### 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. 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 : Surround spill with absorbents and place a damp covering over the area to minimise entry of the material into the air. Add excess liquid to allow the material to enter into solution. Soak up with inert absorbent material. 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.

### 7. HANDLING AND STORAGE

#### Handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing. Avoid breathing dust, fume, gas, mist, vapours or spray. Do not swallow. Do not get in eyes. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment. Keep container tightly closed. Do not eat, drink or smoke when using this product. Take care to prevent spills, waste and minimize release to the environment.



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Avoidance of contact : None.

### Storage

Conditions for safe storage : Keep in properly labelled containers.  
Store locked up.  
Keep tightly closed.  
Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:  
Self-reactive substances and mixtures  
Organic peroxides  
Oxidizing agents  
Explosives

Packaging material : Unsuitable material: None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

| Components           | CAS-No.   | Value type (Form of exposure)      | Control parameters / Permissible concentration | Basis  |
|----------------------|-----------|------------------------------------|--|--------|
| Chromium oxide       | 1308-38-9 | TWA (Inhalable particulate matter) | 0.003 mg/m <sup>3</sup>                        | ACGIH  |
| Chromium trifluoride | 7788-97-8 | PC-TWA                             | 2 mg/m <sup>3</sup> (Fluorine)                 | CN OEL |
|                      |           | TWA                                | 2.5 mg/m <sup>3</sup> (Fluorine)               | ACGIH  |
| Carbon               | 7440-44-0 | PC-TWA (Total dust)                | 3 mg/m <sup>3</sup>                            | CN OEL |
| Hydrofluoric acid    | 7664-39-3 | MAC                                | 2 mg/m <sup>3</sup> (Fluorine)                 | CN OEL |
|                      |           | TWA                                | 0.5 ppm (Fluorine)                             | ACGIH  |
|                      |           | C                                  | 2 ppm (Fluorine)                               | ACGIH  |

### Biological occupational exposure limits

| Components           | CAS-No.   | Control parameters  | Biological specimen | Sampling time  | Permissible concentration         | Basis  |
|----------------------|-----------|---------------------|---------------------|----------------|-----------------------------------|--------|
| Chromium trifluoride | 7788-97-8 | fluoride (Fluorine) | Urine               | After shift    | 42 Millimoles per mole creatinine | CN BEI |
|                      |           | fluoride (Fluorine) | Urine               | After shift    | 7 mg/g creatinine                 | CN BEI |
|                      |           | fluoride (Fluorine) | Urine               | Prior to shift | 24 Millimoles per mole            | CN BEI |

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|-------------------|-----------|---------------------|-------|--|-----------------------------------|-----------|
|                   |           | fluoride (Fluorine) | Urine | Prior to shift   | 4 mg/g creatinine                 | CN BEI    |
|                   |           | Fluoride (Fluorine) | Urine | Prior to shift (16 hours after exposure ceases)          | 2 mg/l                            | ACGIH BEI |
|                   |           | Fluoride (Fluorine) | Urine | End of shift (As soon as possible after exposure ceases) | 3 mg/l                            | ACGIH BEI |
| Hydrofluoric acid | 7664-39-3 | fluoride (Fluorine) | Urine | After shift  | 42 Millimoles per mole creatinine | CN BEI    |
|                   |           | fluoride (Fluorine) | Urine | After shift  | 7 mg/g creatinine                 | CN BEI    |
|                   |           | fluoride (Fluorine) | Urine | Prior to shift   | 24 Millimoles per mole creatinine | CN BEI    |
|                   |           | fluoride (Fluorine) | Urine | Prior to shift   | 4 mg/g creatinine                 | CN BEI    |
|                   |           | Fluoride (Fluorine) | Urine | Prior to shift (16 hours after exposure ceases)          | 2 mg/l                            | ACGIH BEI |
|                   |           | Fluoride (Fluorine) | Urine | End of shift (As soon as possible after exposure ceases) | 3 mg/l                            | ACGIH BEI |

**Engineering measures** : Minimize workplace exposure concentrations.  
If sufficient ventilation is unavailable, use with local exhaust ventilation.

### 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 : Particulates type

Eye/face protection : Wear the following personal protective equipment:



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Chemical resistant goggles must be worn.  
If splashes are likely to occur, wear:  
Face-shield

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).

### Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! 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.

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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Colour : green, black

Odour : none

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



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|  |   |  |
|--|---|--|
| Flash point                                      | : | Not applicable   |
| Evaporation rate                                 | : | Not applicable   |
| Flammability (solid, gas)                        | : | No data available  |
| Upper explosion limit / Upper flammability limit | : | No data available  |
| Lower explosion limit / Lower flammability limit | : | No data available  |
| Vapour pressure                                  | : | Not applicable   |
| Relative vapour density                          | : | Not applicable   |
| Relative density                                 | : | No data available  |
| Solubility(ies)<br>Water solubility              | : | No data available  |
| Partition coefficient: n-octanol/water           | : | Not applicable   |
| Auto-ignition temperature                        | : | No data available  |
| Decomposition temperature                        | : | No data available  |
| Viscosity<br>Viscosity, kinematic                | : | Not applicable   |
| Explosive properties                             | : | Not explosive  |
| Oxidizing properties                             | : | The substance or mixture is not classified as oxidizing. |
| Particle characteristics<br>Particle size        | : | No data available  |

### 10. STABILITY AND REACTIVITY

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | Not classified as a reactivity hazard. |
| Chemical stability                 | : | Stable under normal conditions.        |
| Possibility of hazardous reactions | : | None known.                            |
| Conditions to avoid                | : | None known.                            |
| Incompatible materials             | : | None.                                  |

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Hazardous decomposition products : No hazardous decomposition products are known.

### 11. TOXICOLOGICAL INFORMATION

Exposure routes : Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Harmful if swallowed.  
Toxic in contact with skin.

#### Product:

Acute oral toxicity : Acute toxicity estimate: 428.57 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 30000 ppm  
Exposure time: 4 h  
Test atmosphere: gas  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 1,000 mg/kg  
Method: Calculation method

#### Components:

##### Chromium oxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Acute inhalation toxicity : LC50 (Rat): > 5.41 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

##### Chromium trifluoride:

Acute oral toxicity : LD50 (Guinea pig): 150 mg/kg  
Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.  
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Remarks: Based on data from similar materials

##### Carbon:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 423  
Assessment: The substance or mixture has no acute oral toxicity



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Acute inhalation toxicity : LC50 (Rat): > 8.5 mg/l  
Exposure time: 1 h  
Test atmosphere: dust/mist

### Hydrofluoric acid:

Acute inhalation toxicity : LC50 (Mouse): 342 ppm  
Exposure time: 1 h  
Test atmosphere: gas  
Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : Acute toxicity estimate: 5 mg/kg  
Method: Expert judgement  
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

### Skin corrosion/irritation

Causes severe burns.

### Components:

#### Chromium oxide:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

#### Chromium trifluoride:

Result : Corrosive after 4 hours or less of exposure

#### Carbon:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

#### Hydrofluoric acid:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Corrosive after 3 minutes or less of exposure

### Serious eye damage/eye irritation

Causes serious eye damage.

### Components:

#### Chromium oxide:

Species : Rabbit  
Result : No eye irritation  
Method : OECD Test Guideline 405



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### Chromium trifluoride:

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

### Carbon:

Species : Rabbit  
Result : No eye irritation  
Method : OECD Test Guideline 405

### Hydrofluoric acid:

Species : Rabbit  
Result : Irreversible effects on the eye

### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified based on available information.

### Components:

#### Chromium oxide:

Test Type : Buehler Test  
Exposure routes : Skin contact  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : negative  
Remarks : Based on data from similar materials

#### Chromium trifluoride:

Test Type : Maximisation Test  
Exposure routes : Skin contact  
Species : Guinea pig  
Result : Probability or evidence of skin sensitisation in humans  
Remarks : Based on data from similar materials

#### Carbon:

Test Type : Local lymph node assay (LLNA)  
Exposure routes : Skin contact  
Species : Mouse  
Method : OECD Test Guideline 429  
Result : negative

### Germ cell mutagenicity

Not classified based on available information.



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### Components:

#### **Chromium oxide:**

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative
- Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Method: OECD Test Guideline 474  
Result: negative

#### **Chromium trifluoride:**

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative  
Remarks: Based on data from similar materials
- Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)  
Species: Mouse  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

#### **Carbon:**

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative
- Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative
- Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative

#### **Hydrofluoric acid:**

- Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative
- Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)  
Species: Mouse  
Application Route: Ingestion



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Result: negative  
Remarks: Based on data from similar materials

### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **Chromium oxide:**

Species : Rat  
Application Route : Ingestion  
Exposure time : 2 Years  
Result : negative

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

#### **Chromium oxide:**

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

#### **Hydrofluoric acid:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

### **STOT - single exposure**

Not classified based on available information.

### **STOT - repeated exposure**

Not classified based on available information.

### **Repeated dose toxicity**

### **Components:**

#### **Chromium oxide:**

Species : Rat  
NOAEL : 2,000 mg/kg



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Application Route : Ingestion  
Exposure time : 90 Days

### Aspiration toxicity

Not classified based on available information.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

#### Chromium oxide:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 10,000 mg/l  
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 848.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Danio rerio (zebra fish)): 1,000 mg/l  
Exposure time: 30 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 0.02 mg/l  
Exposure time: 21 d  
Remarks: No toxicity at the limit of solubility

Toxicity to microorganisms : EC50: > 10,000 mg/l  
Exposure time: 3 h

#### Chromium trifluoride:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 1 - 10 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l  
Exposure time: 48 h  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : ErC50 (Scenedesmus capricornutum (fresh water algae)): > 0.1 - 1 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

NOEC (Scenedesmus capricornutum (fresh water algae)): > 0.1 - 1 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

M-Factor (Acute aquatic toxicity) : 1



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Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): > 0.1 - 1 mg/l  
Exposure time: 72 d  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 1 - 10 mg/l  
Exposure time: 21 d  
Remarks: Based on data from similar materials

### Carbon:

Toxicity to fish : LL50 (Danio rerio (zebra fish)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 24 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 202  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EL10 (Desmodesmus subspicatus (green algae)): > 1 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

EL50 (Desmodesmus subspicatus (green algae)): > 100 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

### Hydrofluoric acid:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 100 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Scenedesmus subspicatus): > 10 - 100 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

NOEC (Scenedesmus quadricauda (Green algae)): > 10 - 100 mg/l  
Exposure time: 7 h  
Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox- : NOEC (Oncorhynchus mykiss (rainbow trout)): > 1 mg/l



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Toxicity : Exposure time: 21 d  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 1 mg/l  
Exposure time: 21 d  
Remarks: Based on data from similar materials

Toxicity to microorganisms : EC10 (activated sludge): > 100 mg/l  
Exposure time: 3 h  
Remarks: Based on data from similar materials

### Persistence and degradability

No data available

### Bioaccumulative potential

#### Components:

##### Chromium oxide:

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 260 - 800

##### Hydrofluoric acid:

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 149

Partition coefficient: n-octanol/water : log Pow: -1.4

### Mobility in soil

No data available

### Other adverse effects

No data available

## 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.

## 14. TRANSPORT INFORMATION

### International Regulations



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### UNRTDG

UN number : UN 2923  
Proper shipping name : CORROSIVE SOLID, TOXIC, N.O.S.  
(Chromium trifluoride, Hydrofluoric acid)  
Class : 8  
Subsidiary risk : 6.1  
Packing group : II  
Labels : 8 (6.1)  
Environmentally hazardous : yes

### IATA-DGR

UN/ID No. : UN 2923  
Proper shipping name : Corrosive solid, toxic, n.o.s.  
(Chromium trifluoride, Hydrofluoric acid)  
Class : 8  
Subsidiary risk : 6.1  
Packing group : II  
Labels : Corrosive, Toxic  
Packing instruction (cargo aircraft) : 863  
Packing instruction (passenger aircraft) : 859

### IMDG-Code

UN number : UN 2923  
Proper shipping name : CORROSIVE SOLID, TOXIC, N.O.S.  
(Chromium trifluoride, Hydrofluoric acid)  
Class : 8  
Subsidiary risk : 6.1  
Packing group : II  
Labels : 8 (6.1)  
EmS Code : F-A, S-B  
Marine pollutant : yes

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

Not applicable for product as supplied.

### National Regulations

#### GB 6944/12268

UN number : UN 2923  
Proper shipping name : CORROSIVE SOLID, TOXIC, N.O.S.  
(Chromium trifluoride, Hydrofluoric acid)  
Class : 8  
Subsidiary risk : 6.1  
Packing group : II  
Labels : 8 (6.1)  
Marine pollutant : yes

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.



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### 15. REGULATORY INFORMATION

#### National regulatory information

##### Law on the Prevention and Control of Occupational Diseases

##### Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : This product is not listed in the catalogue of hazardous chemicals, but it meets the definition of hazardous chemicals and its principles of determination.

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218) : Not listed

Hazardous Chemicals for Priority Management under SAWS : Not listed

Catalogue of Specially Controlled Hazardous Chemicals : Not listed

List of Explosive Precursors : Not listed

##### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Listed

##### Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export : Not listed

##### Regulation on the Administration of Precursor Chemicals

Catalogue and Classification of Precursor Chemicals : Not listed

##### Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

##### Regulations of Ozone Depleting Substances Management

List of Controlled Ozone Depleting Substances Import and Export : Not listed

List of Controlled Ozone Depleting Substances : Not listed

##### Environmental Protection Law

List of Priority Controlled Chemicals : Not listed

List of Key Controlled New Pollutants : Not listed

List of Toxic and Hazardous Water Pollutants : Not listed



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List of Toxic and Hazardous Air Pollutants : Listed

List of Toxic and Hazardous Soil Pollutants : Listed

### Measures for the Administration of Non-Medical Use of Narcotic Drugs and Psychotropic Substances

Catalogue of Controlled Narcotic Drugs and Psychotropic Substances with Non-Medical Use : Not listed

### Measures for the Administration on Import and Export Licenses for Dual-Use Items and Technologies

Catalogue for Dual-Use Items and Technologies : Not listed

## 16. OTHER INFORMATION

Revision Date : 2025/10/28

Other information : Chemours™ and the Chemours Logo are trademarks of The Chemours Company.  
Before use read Chemours safety information.  
For further information contact the local Chemours office or nominated distributors.

### Further information

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

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)  
CN BEI : China. Biological Occupational Exposure Indices  
CN OEL : Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / C : Ceiling limit  
CN OEL / PC-TWA : Permissible concentration - time weighted average  
CN OEL / MAC : Maximum allowable concentration

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

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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 Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; 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 - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative 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

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CN / EN

