

# Safety Data Sheet according to (EC) No 1907/2006

Pages: 4  
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## DFC-4012

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### 1 Identification of Substance/Preparation & Company

**Trade Name:** DFC-4012 (Stannous Chloride Dihydrate, ultra pure)

**Intended Use:** Tin Plating, Fabric Dyeing, Optoelectronics, Glass Manufacture/Processing, General Reagent

**Manufacturer:**

Dawnmist Fine Chemicals  
(A Division of Dawnmist Studio)  
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Exwick  
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United Kingdom  
+44 1392 493 482

**Email address of person responsible for Safety Data Sheet:**  
tech@dawnmist.org

**Emergency Information:**  
+44 1392 493 482

### 2 Hazards Identification

R 22-34: Harmful if swallowed. Causes burns.

S 26-36/37/38-45: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Pictogram: Corrosive.

### 3 Composition/information on ingredients

**General Chemical Description:**

Stannous chloride dihydrate, ultra pure.

**Declaration of ingredients according to EC/1907/2006:**

CAS-No	EC-No	Content	Classification
10025-69-1	EC 231-868-0	> 99.8%, > 99.95% TMB	R:22-34 S:26-36/37/38-45

For full text of any R- or S-phrases see section 2 above.

## 4 First aid measures

**Inhalation:**

Move person to fresh air. If not breathing give artificial respiration. Consult a physician.

**Skin Contact:**

Immediately remove contaminated clothes, shoes etc. Wash off with soap and plenty of water. Consult a physician.

**Eye Contact:**

Rinse well for at least 15 minutes using water, consult a physician.

**Ingestion:**

Do **not** induce vomiting. Never give anything by mouth to an unconscious patient; if the patient is conscious, wash mouth out with water. Consult a physician.

## 5 Fire-fighting measures

**Combustion behaviour:**

Not combustible in itself, but may form corrosive fumes in a fire.

**Special protection for firefighters:**

Wear self-contained breathing apparatus if necessary.

**Fire-extinguishing media:**

Water, AFFF, dry powder or carbon dioxide — according to what else is involved in the fire.

## 6 Accidental release measures

**Personal precautions:**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Work in an adequately ventilated area and in the event of a release, move personnel to fresh air.

**Environmental precautions:**

Do not allow product to enter drains.

**Clean-up methods:**

Pick up and place in closed disposal containers without forming dust. A damp cloth can help with pickup but the cloth must also be disposed of as for the product itself.

## 7 Handling and Storage

**Handling:**

Avoid formation of dust and aerosols. Provide appropriate ventilation at any point where dust is formed.

**Storage:**

Keep container tightly closed and in a dry area. To maintain optimum purity, store under inert gas as it is a reducing agent and will slowly react with oxygen — faster at elevated temperature.

## 8 Exposure controls/personal protection

### Respiratory Protection:

Risk assessment should be performed on any process involving this product in the dry powder form and any necessary engineering controls to effect sufficient respiratory protection should be implemented (also see above re face masks). When product is in solution, as it will be in most applications, there is no dust risk.

### Hand protection:

Wear gloves meeting EN374.

### Eye protection:

Face shield and/or safety glasses.

### General hygiene measures:

Follow normal industrial safety and hygiene practices; wash hands before breaks and at end of work in case of trace contamination.

## 9 Physical & chemical properties

### General:

Form Fine crystals (may be fragmented)  
Colour White

### Phys/Chem properties:

pH	not relevant as dry powder
Melting Point	38 °C (lit)
Boiling Point	652 °C (lit)
Flash point	not applicable
Ignition temperature	no data available
Lower explosive limit	no data available
Upper explosive limit	no data available
Solubility	Water, many organic solvents (especially alcohols)

## 10 Stability and reactivity

### Conditions to avoid:

Hygroscopic — avoid moisture. Reducing agent — sensitive to O<sub>2</sub> — but otherwise stable in storage.

### Materials to avoid:

Strong bases, strong oxidants, extremely strong reductants (e.g. alkali metals), carbides, boron halides.

### Hazardous decomposition products:

In fire conditions can form hydrogen chloride gas.

## 11 Toxicological Information

### Oral toxicity:

LD50 in *rats* — 700mg/kg; harmful if swallowed: causes burns.

### Inhalative toxicity:

Prolonged or repeated exposure may cause allergy in predisposed persons. Acute exposure

can be destructive to mucosa of upper respiratory system.

**Skin irritation:**

Prolonged or repeated exposure may cause allergy or chemical dermatitis in predisposed persons. Systemic toxicity is theoretically possible if a large enough area of skin is exposed and not washed promptly. May cause skin irritation or damage if not washed off promptly.

**Eye irritation:**

Severe irritation, *rabbit* — 4 hours. May cause eye burns if not washed out promptly.

**Other remarks:**

Not known or suspected to be carcinogenic; causes reproductive toxicity in *rats*. No data on reproductive toxicity in *humans*.

## 12 Ecological information

**Mobility:**

No data available.

**Persistence & biodegradability:**

No data available.

**Bioaccumulative potential:**

No data available.

**General ecological information:**

No data available.

## 13 Disposal considerations

**Product disposal:**

Observe local regulations on chemical waste disposal. Incineration in a properly designed chemical incinerator is recommended. Where permitted, solutions can be rendered safe for landfill by treatment with an excess of calcium carbonate.

**Disposal of uncleaned packages:**

Treat as for product.

## 14 Transport information

- UN Number: ADR/RID 3260; IMDG 3260; IATA 3260.
- UN Proper Shipping Name: Corrosive solid, acidic, inorganic, NOS (Stannous chloride dihydrate)
- Transport Hazard Class: 8 (ADR/RID, IMDG, IATA)
- Environmental Hazard: No