

**ZINC FLUORIDE
CAS NO 7783-49-5**

**MATERIAL SAFETY DATA SHEET
SDS/MSDS**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Zinc Fluoride

CAS-No. : 7783-49-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi -110002
INDIA

Telephone : +91 11 49404040
Email : care@cdfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H315

Causes skin irritation.

H318

Causes serious eye damage.

H335

May cause respiratory irritation.

Precautionary statement(s)

P280

Wear eye protection/ face protection.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Supplemental Hazard Statements none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Strong hydrogen fluoride-releaser

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : ZnF_2
Molecular weight : 103.39 g/mol
CAS-No. : 7783-49-5
EC-No. : 232-001-9

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Zinc fluoride		
CAS-No.	7783-49-5	<= 100 %
EC-No.	232-001-9	
	Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318, H335	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Hydrofluoric (HF) acid burns require immediate and specialized first aid a hours depending on the concentration of HF. After decontamination with wa penetration/absorption of the fluoride ion. Treatment should be directed exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel exposures may require subcutaneous calcium gluconate except for digital a technique, due to the potential for tissue injury from increased pressure and should be considered when undergoing decontamination. Prevention of a obtained by giving milk, chewable calcium carbonate tablets or Milk of Ma hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician. First treatment with calcium gluconate paste.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hydrogen fluoride, Zinc/zinc oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Do not store in glass
Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---|------------------------------------|
| a) Appearance | Form: powder
Colour: white |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing point | Melting point/range: 872 °C - lit. |
| f) Initial boiling point and boiling range | No data available |
| g) Flash point | Not applicable |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | No data available |
| k) Vapour pressure | 1 mmHg at 970 °C |
| l) Vapour density | No data available |
| m) Relative density | 4.95 g/cm ³ at 25 °C |
| n) Water solubility | No data available |
| o) Partition coefficient: n-octanol/water | No data available |
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperature | No data available |
| r) Viscosity | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Reacts dangerously with glass.

10.5 Incompatible materials

Strong oxidizing agentsglass

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Hydrogen fluoride, Zinc/zinc oxides

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data availableZinc fluoride

Inhalation: No data available(Zinc fluoride)

Skin corrosion/irritation

No data available(Zinc fluoride)

Serious eye damage/eye irritation

No data available(Zinc fluoride)

Respiratory or skin sensitisation

No data available(Zinc fluoride)

Germ cell mutagenicity

No data available(Zinc fluoride)

Carcinogenicity

This product is or contains a component that is not classifiable as to its classification.(Zinc fluoride)
(Zinc fluoride)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Zinc fluoride)

Reproductive toxicity

No data available(Zinc fluoride)

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.(Zinc fluoride)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Zinc fluoride)

Additional Information

RTECS: ZH3500000

Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia.

Salivation, Nausea, Vomiting, Fever, Cough, Shortness of breath, Headache(Zinc fluoride)

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(Zinc fluoride)

