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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Cadmium fluoride Product Code : C 1270 CAS No: 7790-79-6

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet Company identification OTTO CHEMIE PVT LTD No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number Phone no. : + 91 98200 41841 (10 : 00 am - 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 2), H330 Germ cell mutagenicity (Category 1B), H340 Carcinogenicity (Category 1B), H350 Reproductive toxicity (Category 1B), H360FD Specific target organ toxicity - repeated exposure (Category 1), H372 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410 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) H301 Toxic if swallowed. Fatal if inhaled. H330 H340 May cause genetic defects. H350 May cause cancer. H360FD May damage fertility. May damage the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. Precautionary statement(s) P201 Obtain special instructions before use. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P260 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P308 + P313 IF exposed or concerned: Get medical advice/ attention. Supplemental Hazard Statements none

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-release

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2.3 Other hazards

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SECTION 3: Composition/information on ingredients

3.1 Substances	
Formula	: CdF2
Molecular weight	: 150.41 g/mol
CAS-No.	: 7790-79-6
EC-No.	: 232-222-0

Component		Classification	Concentration	
Cadmium fluoride Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)				
CAS-No. EC-No.	7790-79-6 232-222-0	Acute Tox. 3; Acute Tox. 2; Muta. 1B; Carc. 1B; Repr. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H301, H330, H340, H350, H360FD, H372, H400, H410 Concentration limits: >= 0.01 %: Carc. 1B, H350; >= 7 %: STOT RE 1, H372; 0.1 - < 7 %: STOT RE 2, H373; M-Factor - Aquatic Acute: 10	<= 100 %	

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. Take victim immediately to hospital. Consult a physician.First treatment with calcium gluconate paste.

In case of eye contact

Flush eyes with water as a precaution.

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 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, Cadmium/cadmium oxides 5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary. 5.4 Further information No data available

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SECTION 6: Accidentalrelease measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. 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
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
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. Avoid exposure - obtain special instructions before use. 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, acute toxic Cat. 1 and 2 / very toxic hazardous materials 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

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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 th 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

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form	: powder
b) Odour	
Colour:	white
c) Odour Threshold	No data available
d) pH No data available	
e) Melting point/freezing	No data available
point	
f) Initial boiling point and	No data available
boiling range	

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g) Flash point
h) Evaporation rate
i) Flammability (solid, gas)
j) Upper/lower
flammability or
explosive limits
k) Vapour pressure
I) Vapour density
m) Relative density
n) Water solubility
o) Partition coefficient: n- octanol/water
p) Auto-ignition
temperature
q) Decomposition
temperature
r) Viscosity
 s) Explosive properties
t) Oxidizing properties

Not applicable No data available No data available No data available

No data available No data available 6.33 g/cm3 at 25 °C No data available No data available No data available

No data available

No data available No data available 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
Oxidizing agentsglass
10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Hydrogen fluoride, Cadmium/cadmium 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 Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on Ohronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

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(Cadmium fluoride)
12.5 Results of PBT and vPvB assessment
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. 12.6 Other actions and very bioaccumulative (VPvB) at levels of 0.1% or higher. 12.6 Other actions and very bioaccumulative (VPvB) at levels of 0.1% or higher. 12.6 Other actions and very bioaccumulative (VPvB) at levels of 0.1% or higher. 12.6 Other actions and very bioaccumulative (VPvB) at levels of 0.1% or higher. 12.6 Other actions and very bioaccumulative (VPvB) at levels of 0.1% or higher. 12.6 Other actions actions

toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Other adverse effects Very toxic to aquatic life with long lasting effects. SECTION 13: Disposal considerations

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13.1 Waste treatment methods

Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber. Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

SECTION 15: Regulatory info	ormation		
No data available			
14.6 Special precautions for us	ser		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no	
14.5 Environmental hazards			1
ADR/RID: II	IMDG: II	IATA: II	
14.4 Packaging group			
ADR/RID: 6.1	/ IMDG: 6.1	IATA: 6.1	
14.3 Transport hazard class(e	s)	,	
IATA:	Cadmium compound (Cadmium fluorid	de)	
IMDG:	CADMIUM COMPOUND (Cadmium flu	uoride)	
ADR/RID:	CADMIUM COMPOUND (Cadmium flu	uoride)	
14.2 UN proper shipping name	9		
ADR/RID: 2570	IMDG: 2570	IATA: 2570	
14.1 UN number			

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Authorisations and/or restrictions on use 15.2 Chemical safety assessment For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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