1. Product and Company Identifaction

www.rxmarine.com

Product Name Cerium III fluoride
Part Number RXSOL-60-6620-029

Company Details:....

RX MARINE INTERNATIONAL 105, A wing , BSEL , TECH PARK. VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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Emailmail@rxmarine.comWebsitewww.rxmraine.com

2. Composition / Information on ingredients

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Component CAS No Weight-% Cerium fluoride (CeF3) 7758-88-5 99.9

3. Hazards Identification

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Classification This chemical is considered hazardous by the 2012 OSHA Hazard

Communication Standard (29 CFR 1910.1200)

Acute oral toxicity

Acute Inhalation Toxicity - Dusts and Mists

Category 4

Skin Corrosion/Irritation

Category 2

Serious Eye Damage/Eye Irritation

Category 2

Specific target organ toxicity (single exposure)

Category 3

Label elements

Signal Word Warning

Hazard Statements Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

Harmful if swallowed or if inhaled

Precautionary Statements Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. ContinuerinsingIf eye irritation persists: Get medical advice/attention

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

None identified

Hazards not otherwise classified (HNOC)

4. First Aid Measures

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General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least

15 minutes. Getmedical attention.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. If skin

irritationpersists, call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get

medical attentionif symptoms occur.

Clean mouth with water and drink afterwards plenty of water. Get

medical attentionif symptoms occur.

None reasonably foreseeable.

Treat symptomatically

5. Fire-fighting Measures

Most important symptoms and effects

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Suitable Extinguishing Media

Unsuitable extinguishing media

Flash Point Method

Ingestion

Note to physicians

Autoignition Temperature

Explosion Limits

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

No information available

No information available

No information available

Not applicable

Upper No data available
Lower No data available

Sensitivity to Mechanical Impact

Sensitivity to Static Discharge

No information available

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition

Hazardous Combustion Products Gaseous hydrogen fluoride (HF). Cerium oxide

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand,

MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

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Personal precautions Ensure adequate ventilation. Use personal protective equipment as

required. Avoiddust formation.

Environmental Precautions Should not be released into the environment. Do not allow material to

contaminategroundwater system. Do not flush into surface water or

sanitary sewer system.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in

suitable, closedcontainers for disposal.

7. Handling and Storage

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Handling Wear personal protective equipment/face protection. Ensure adequate

ventilation. Avoidingestion and inhalation. Avoid dust formation. Do not

get in eyes, on skin, or onclothing.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly

closed. Protect fromdirect sunlight. Incompatible Materials. Acids.

8. Exposure controls and personal protection

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Exposure Guidelines

Component ACGIH TLV OSHA PEL NIOSH Mexico OEL (TWA)
Cerium fluoride (CeF3) TWA: 2.5 mg/m3 (Vacated) TWA: 2.5 mg/m3 IDLH: 250 mg/m3 TWA: 2.5 mg/m3

TWA: 2.5 mg/m3

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that

eyewashstationsand safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as

describedbyOSHA's eye and face protection regulations in 29 CFR

1910.133 or EuropeanStandardEN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or

EuropeanStandardEN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation

or other symptoms are experienced.

Recommended Filter type Particulates filter conforming to EN 143.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

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Physical State Powder Solid

Appearance White

Odor No information available
Odor Threshold No information available

pH Not applicable

 $\begin{array}{ccc} \mbox{Melting Point/Range} & 1460\ ^{\circ}\mbox{C}\ /\ 2660\ ^{\circ}\mbox{F} \\ \mbox{Boiling Point/Range} & 2300\ ^{\circ}\mbox{C}\ /\ 4172\ ^{\circ}\mbox{F} \end{array}$

Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

Upper No data available
Lower No data available

Vapor Pressure No information available

Vapor Density Not applicable

Density 6.16

Specific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNot applicable

Decomposition Temperature No information available

Viscosity Not applicable

Molecular Formula Ce F3
Molecular weight 197.12

10. Stability and reactivity

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Reactive Hazard None known, based on information available Stability Stable. Light sensitive. Moisture sensitive.

Conditions to Avoid Exposure to light. Incompatible products. Exposure to moist air or water

Incompatible Materials Acid

Hazardous Decomposition Products

Gaseous hydrogen fluoride (HF), Cerium oxide
Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

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Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cerium fluoride (CeF3)	LD50 > 5 g/kg (Rat)	Not listed	LC50 > 5.53 mg/L (Rat) 4 h

Toxicologically SynergisticNo information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as

acarcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico			
Cerium fluoride (CeF3)	7758-88-5	Not listed	Not listed	Not listed	Not listed	Not listed			
Mutagenic Effects				No information available					
Reproductive Effects				No information available					
Developmental Effects			No in	No information available					
Teratogenicity				No information available					
STOT - single exposure				None known					
STOT - repeated exposure			None	None known					
Aspiration hazard			No in	No information available					
Symptoms / effects,both acute and delayed			No in	No information available					
Endocrine Disruptor Information				No information available					
Other Adverse Effects				The toxicological properties have not been fully investigated.					
•				The toxicological properties have not been fully investigated.					

12. Ecological information

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Ecotoxicity May cause long-term adverse effects in the environment. Do not allow

material to contaminate ground water system

Persistence and degradability May persist

Bioaccumulation/ Accumulation No information available
Mobility No information available.

13. Disposal considerations

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Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical

is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure

complete and accurate classification

14. Transport information

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DOT Not regulated TDG Not regulated IATA Not regulated IMDG/IMO Not regulated Not regulated IMDG/IMO

15. Regulatory information

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United States of America Inventory

Component CAS No TSCA TSCA Inventory TSCA - EPA Regulatory notification - Flags

Active-Inactive

Cerium fluoride (CeF3) 7758-88-5 X ACTIVE -

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Not applicable

Substances & Mixtures, Under TSCA Section 6(h) (PBT)

TSCA 12(b) - Notices of Export Not applicable

International Inventories Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines

(PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China

(IECSC), Korea(KECL).

Component	t CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Cerium fluoride (CeF3)	7758-88-5	X	-	231-841-3	X	X	X	X	X	KE-05417
U.S. Federal Regulations										

SARA 313

SARA 311/312 Hazard Categories

CWA (Clean Water Act)

Clean Air Act

OSHA - Occupational Safety and

Health Administration

CERCLA

California Proposition 65 U.S. State Right-to-Know

Regulations

U.S. Department of Transportation

Reportable Quantity (RQ): N **DOT** Marine Pollutant N DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

16. Other information

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Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

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Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not containanychemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate lassifications.

Not applicable Not applicable Not applicable

This material, as supplied, does not contain any substances regulated as hazardous substances under the ComprehensiveEnvironmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or statelevel pertaining to releases of this material.

This product does not contain any Proposition 65 chemicals.

This product does not contain any DHS chemicals.

Not applicable

Not applicable

arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.