

1. Product and Company Identification

www.rxmarine.com

Product Name: Zirconium Nitrate
Part Number: RXSOL-60-6605-878

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

Phone: +91 22 20871200 - 1400
Fax: +91 22 27612100 :::AOH :0091 9821214367
Email: mail@rxmarine.com
Website: www.rxmraine.com

2. Composition / Information on ingredients

www.rxmarine.com

Chemical Name	Cas No	EC No	Weight	Formula
Zirconyl Nitrate	14985-18-3	237-529-3	231.23 g/mol	N ₂ O ₇ Zr · xH ₂ O

3. Hazards Identification

www.rxmarine.com

Signal Word	Danger
Hazard Statements	H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage.
Precautionary statements	P220 Keep/Store away from clothing/ combustible materials. P280 Wear protective gloves/ protective clothing/ eye protection/ face Page 1 of 7Zirconyl Nitrate tech. CAS No 14985-18-3 MATERIAL SAFETY DATA SHEETSDS/MSDS protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor.
Classification of the substance or mixture	No data available
Supplemental Hazard Statements	No data available
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

4. First Aid Measures

www.rxmarine.com

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
Eye Contact	Flush eyes with water as a precaution.
Swallowed	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician

Inhalation	No data available
Ingestion	No data available
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
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

www.rxmarine.com

Flammability	No data available
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Unsuitable extinguishing media	Nitrogen oxides (NO _x), Zirconium oxides
Special hazards arising from the substance or mixture	Carbon oxides Borane/boron oxides
Further information	Use water spray to cool unopened containers.
Hazardous combustion products	No data available
Advice for firefighters	No data available
Protective Equipment	No data available
Specific Hazards Arising from the Chemical	No data available

6. Accidental Release Measures

www.rxmarine.com

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.
Spillage	No data available
Personal Protection	No data available
Environmental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning	Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13

7. Handling and Storage

www.rxmarine.com

Advice on protection against fire and explosion	No data available
Incompatible materials	No data available
Hygiene measures	No data available
Advice on safe handling	Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. For precautions see section 2.2
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Oxidizing hazardous material
Storage class	Storage class (TRGS 510) 11 Combustible Solids
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	No data available

8. Exposure controls and personal protection

www.rxmarine.com

Exposure controls	Personal protective equipment
Engineering Control	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)
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.
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.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If the full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Other Protection Measure	No data available

9. Physical and chemical properties

www.rxmarine.com

Physical state	Powder
Colour	White
Odour	No data available
Odor Threshold	No data available
pH	No data available
Melting Point	No data available
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	No data available
Viscosity	No data available
Density	No data available
Relative Density	No data available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	No data available
Solubility	No data available
Ignition temperature	No data available
Particle characteristics	No data available

10. Stability and reactivity

www.rxmarine.com

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available

Incompatible materials	Strong reducing agents, Strong acids
Hazardous product dicomposition	Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx), Zirconium oxides Other decomposition products - No data available In the event of fire: see section 5

11. Toxicological information

www.rxmarine.com

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Carcinogenicity	IARC 2A - Group 2A: Probably carcinogenic to humans (Zirconium dinitrate oxide hydrate)
Germ cell mutagenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity-single exposure	No data available
Additional Information	Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea(Zirconium dinitrate oxide hydrate)

12. Ecological information

www.rxmarine.com

Persistence and degradability	No data available
Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity	No data available
Toxicity to bacteria	No data available
Toxicity to algae	No data available
Products Biodegradation	No data available
Mobility in soil	No data available
Results of PBT av PvB 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.
Endocrine disrupting properties	No data available .
Other adverse effects	No data available .

13. Disposal considerations

www.rxmarine.com

Product	Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company
Contaminated packaging	Dispose of as unused product
Waste treatment Method	No data available

14. Transport information

www.rxmarine.com

UN number	ADR/RID:3085 IMDG:3085 IATA:3085
UN proper shipping name	ADR/RID:OXIDIZING SOLID, CORROSIVE, N.O.S. (Zirconium dinitrate oxide hydrate) IMDG:OXIDIZING SOLID, CORROSIVE, N.O.S. (Zirconium dinitrate oxide hydrate) IATA: OXIDIZING SOLID, CORROSIVE, N.O.S. (Zirconium dinitrate oxide hydrate)
Transport hazard classess	ADR/RID:5.1 (8) IMDG:5.1 (8) IATA:5.1 (8)

Packaging group	ADR/RID:II IMDG:II IATA:II
Environmental hazards	ADR/RID:No IMDG Marine pollutant:No IATA: No
Special precautions for user	No data available
Further information	No data available

15. Regulatory information

www.rxmarine.com

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Other regulations	No data available
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

www.rxmarine.com

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 we assume 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.