Material Safety Data Sheet

ZINC CHLORIDE DRY AR (RXSOL-60-6605-840)

1. Product and Company Identifaction

Product Name	ZINC CHLORIDE DRY AR
Part Number	RXSOL-60-6605-840

Company Details:

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

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Email	mail@rxmarine.com
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2. Composition / informationon ingredients

Chemical Name	**CAS**	**EC number**	**Weight**	Index-No.
ZINC CHLORIDE DRY AR	7646-85-7	231-592-0	136.29 g/mol	030-003-00-2

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects.
Classification of the substance or mixture	Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Short-term (acute) aquatic hazard (Category 1), H400 Long-term (chronic) aquatic hazard (Category 1), H410 For the full text of the H-Statements mentioned in this Section, see Section 16
P280 Wear protective gloves.P305 + P351 + P338	NA
Precautionary statements - response	P260 Do not breathe dust. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue
Response	None
Disposal	NA
Prevention	NA
Supplemental Hazard Statements	None
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

General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
Eye Contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
Swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.
Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	NA
Notes to Physician	NA
Most important symptoms and effects, both acute and delaye	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

Flammability	NA
Flash Point	NA
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Hydrogen chloride gas Zinc/zinc oxides Not combustible. Ambient fire may liberate hazardous vapours
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system
Hazardous combustion products	NA
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by
Protective Equipment	NA
Specific Hazards Arising from the Chemical	NA

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Spillage	NA
Personal Protection	NA
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Advice on safe handling	NA
Advice on protection against fire and explosion	NA
Hygiene measures	NA
Precautions for safe handling	For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities	Handle under nitrogen, protect from moisture. Store under nitrogen. Tightly closed. Dry. strongly hygroscopic
Storage conditions	NA
Storage conditions	NA
Storage class	Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Handling	NA
Advice on general occupational hygiene	NA

8. Exposure controls and personal protection

Application Area	Routes of exposure	Health effect	Value
Worker DNEL, longterm	Inhalation	Systemic effects	1 mg/m3
Remarks	Zinc		
Worker DNEL, longterm	dermal	Systemic effects	
	Zinc		
Consumer DNEL, longterm	inhalation	Systemic effects	1,3 mg/m3
	Zinc		
Consumer DNEL, longterm	dermal	Systemic effects	
	Zinc		
Consumer DNEL, longterm	oral	Systemic effects	
	Zinc		

Compartment	Value
Fresh water	20,6 ?g/l
Remarks	Zinc
Fresh water sediment	117,8 mg/kg Zinc
Sea water	6,1 ?g/l Zinc
Sea sediment	56,5 mg/kg Zinc
Sewage treatment plant	52 ?g/lZinc
Soil	35,6 mg/kgZinc

Occupational Exposure limit values	No data available
Biological limit values	No data available
Exposure controls	NA
Engineering Control	NA
Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles
Body Protection	protective clothing

Skin protection	This recommendation applies only to the product stated in the safety data sheet,supplied by us and for the designated use. When dissolving in or mixing with othersubstances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L
Respiratory protection	required when dusts are generated.Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.These measures have to be properly documented.
Other Protection Measure	NA
Control of environmental exposure	Do not let product enter drains.
Thermal hazards	No data available



Gloves



Suit

9. Physical and chemical properties

Physical state	Powder
Colour	White
Odour	Odorless
Odor Threshold	Not Applicable
pH	Not Applicable
Melting Point	293 °C
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate	Not Applicable
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
Density	No data available
Vapour Density	No Data Available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	None
Solubility	851 g/l at 20 °C - OECD Test Guideline 105- completely soluble
Ignition temperature	No information available.
Particle characteristics	No data available
Oxidizing properties	None
Other safety information	No data available

10. Stability and reactivity

Reactivity	No data available

Chemical stability	The product is chemically stable under standard ambient conditions (room temperature)
Stability	No data available
Possibility of hazardous reactions	Violent reactions possible with:sodium
Conditions to avoid	Exposure to moisture.
Incompatible materials	various metals
Hazardous Polymerization	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - male - 1.100 mg/kg (OECD Test Guideline 401) Acute toxicity estimate Oral - 1.100 mg/kg (ATE value derived from LD50/LC50 value) LC50 Inhalation - Rat - female - 10 min - = 1.975 mg/m3 - aerosol Remarks: (ECHA) LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Test Guideline 402)
Skin corrosion/irritation	Skin - MouseSkin - Mouse Remarks: (ECHA)
Serious eye damage/eye irritation	Remarks: Risk of blindness! (Regulation (EC) No 1272/2008, Annex VI)
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)
Rout Of Entry	NA
Toxicity to Animal	NA
Toxic Effects on Human	NA
Germ cell mutagenicity	Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: without metabolic activation Result: negative Remarks: (ECHA) Test Type: Micronucleu Species: Mouse Cell type: Red blood cells (erythrocytes) Application Route: Intraperitoneal Result: negative Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: Zinc sulphate
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Special Remarks on other Toxi Effects on Humans:	NA
Additional Information	Endocrine disrupting properties
Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Rat - male and female - Oral - 13 Weeks - NOAEL (No observed adverse effect level) - 31,52 mg/kg - LOAEL (Lowest observed adverse effect level) - 53,8 mg/kg RTECS: ZH1400000 Zinc chloride and its aqueous solutions are corrosive to the eyes and skin. They cause conjunctivitis and corneal burns in the eye and produce chemical burns, particularly on areas where the skin is broken. Ingestion produces a corrosive action to the mouth, throat, and digestive tract which can include symptoms of stomach pain, nausea, vomiting, bloody diarrhea, swelling of the throat, blood in the urine, and shock. Inhalation irritates the nose and throat producing cough, chest pain, bluish skin, fever, nausea and vomiting, shortness of breath, difficulty in breathing (onset may be delayed by several hours), and pneumonia. Fatalities have occurred by inhalation and ingestion., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Endocrine disrupting properties	NA

12. Ecological information

Persistence and degradability	No data available
Toxicity	NA
Bioaccumulative potential	No data available
Toxicity to fish	Static test LC50 - Oncorhynchus mykiss (rainbow trout) - 0,169 mg/l 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 0,33 mg/l - 48 h(OECD Test Guideline 202)
Toxicity to algae	Static test NOEC - Pseudokirchneriella subcapitata (green algae) - 0,0049 mg/l - 72 h (OECD Test Guideline 201)
Eco Toxicity	Not Available

COD and BOD 5	Not Available
Products Biodegradation:	NA
Mobility in soil	No Information available
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.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Assessment	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	No data available

13. Disposal considerations

Disposal methods	NA
Contaminated packaging	NA
Waste treatment Method	See www.retrologistik.com for processes regarding the return of chemicals and

14. Transport information

UN number	ADR/RID: 2331 IMDG: 2331 IATA: 2331
UN proper shipping name	ADR/RID: ZINC CHLORIDE, ANHYDROU IMDG: ZINC CHLORIDE, ANHYDROUS IATA: Zinc chloride, anhydrous
Transport hazard class(es)	ADR/RID: 8 IMDG: 8 IATA: 8
Packaging group	ADR/RID: III IMDG: III IATA: III
Environmental hazards	ADR/RID: yes IMDG Marine pollutant: yes IATA: no
Special precautions for user	Tunnel restriction code : (E) Further information : No data available
Further information	NA
Transport in bulk according to IMOinstruments	No data available

15. Regulatory information

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.
Safety, health and environmental regulations specific for the product in question	NA
National legislation	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
DSCL (EEC)	NA
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	A Chemical Safety Assessment has been carried out for this substance

16. Other information

Full text of H-Statements referred to under sections 2 and 3.	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation. H400 Harmful if swallowed. H410 Causes severe skin burns and eye damage.
Further information	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.
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