Material Safety Data Sheet

CHROMIUM TRIOXIDE CHROMIC ACID (RXSOL-60-6604-323)

1. Product and Company Identifaction

Product Name	RXSOL-60-6604-323
Product Type	CHROMIUM TRIOXIDE (CHROMIC ACID)
Revised date	

Company Details:

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

Stock Point : Mumbai, Kandla, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat Barka

Phone	+91 22 27815541 / 42
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2. Composition / informationon ingredients

2.1. Substance : Chromium Trioxide
CAS No : 1333-82-0
Substance.
Contains no other components or impurities which will influence the classification of the product.

3. Hazards Identification

3.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Oxidising Solids, H271
Category 1
Acute toxicity (oral), H301
Category 3
Acute toxicity (dermal), H311
Category 3
Acute toxicity (inhal.), H330
Category 2
Skin corrosion/irritation, H314
Category 1A
Sensitisation —
Respiratory, category 1 H334
Sensitisation — Skin, category 1 H317
Germ cell mutagenicity, H340
Category 1B
Carcinogenicity, Category 1A H350
Reproductive toxicity,
Category 2
H361f
Specific target organ
toxicity — Repeated H372
exposure, Category 1
Hazardous to the aquatic
environment — Chronic
Hazard, Category 1 H410
Adverse physicochemical, human health and environmental effects
No additional information available
3.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to displayExtra classification(s) to display

Symbol(s): O : Oxidizing
T : Very toxic
N : Dangerous for the environment
R Phrase(s):R45: CC
R46: May Cause heritable genetic damage.
R9: Explosive when mixed combustible matrial.
S Phrase(s):S53: Avoid exposure – obtain special instruction before use.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60: This material and its container must be disposed of as hazardous waste
S61: avoid release to the environment . refer to special instruction/safety data sheets.
Hazard pictograms

Signal word : Danger
Hazard statements : H271 - May cause fire or explosion; strong oxidiser
H301+H311 - Toxic if swallowed or in contact with skin
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H330 - Fatal if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340 - May cause genetic defects
H350 - May cause cancer
H361f - Suspected of damaging fertility
H372 - Causes damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements : P201 - Obtain special instructions before use
P220 - Keep away from clothing and other combustible materials
P260 - Do not breathe vapours, spray, dust, fume, gas
P273 - Avoid release to the environment
P284 - [In case of inadequate ventilation] wear respiratory protection
3.3. Other hazards
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Get medical advice/attention. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Assure fresh air breathing.
First-aid measures after skin contact : Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion : Rinse mouth. Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : Causes severe skin burns and eye damage. May cause genetic defects. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure.
Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.May cause an allergic skin reaction. May cause cancer by inhalation.
Symptoms/injuries after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin.
Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard
4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

5. Fire-fighting Measures

5.1. Extinguishing media
Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media : Do not use extinguishing media containing water.
5.2. Special hazards arising from the substance or mixture
Fire hazard : May cause fire or explosion; strong oxidiser.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing
risk of burns and injuries.
5.3. Advice for firefighters
Firefighting instructions : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures : No naked lights. No smoking.
6.1.1. For non-emergency personnel
Emergency procedures : Evacuate unnecessary personnel.
6.1.2. For emergency responders
Protective equipment : Use personal protective equipment as required.
Emergency procedures : Ventilate area.
6.2. Environmental precautions
Avoid release to the environment.
6.3. Methods and material for containment and cleaning up
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.
6.4. Reference to other sections
No additional information available

7. Handling and Storage

7.1. Precautions for safe handling
Additional hazards when processed : Hazardous waste due to potential risk of explosion.
Precautions for safe handling : Take precautionary measures against static discharge. Avoid contact with skin and eyes. Provide good ventilation in process area to prevent formation of vapour.
Obtain special instructions before use. Do not breathe vapours. Eliminate all ignition sources if safe to do so.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, including any incompatibilities
Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.
Storage conditions : Keep in fireproof place. Keep container tightly closed.
Incompatible materials : Heat sources. combustible materials.
7.3. Specific end use(s)
No additional information available

8. Exposure controls and personal protection

8.1. Control parameters
No additional information available
8.2. Exposure controls
Personal protective equipment : Wear fire/flame resistant/retardant clothing.
Hand protection : Protective gloves
Eye protection : Chemical goggles or face shield
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of inadequate ventilation wear respiratory protection

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : 196 °C
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available

Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 2.7 g/cm³
Solubility : Water: 63 g/100ml @ 20°C
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available: The substance or mixture is classified as oxidizing with the subcategory 1. May cause fire or explosion; strong oxidiser.
Explosive limits : No data available
9.2. Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity
Thermal decomposition generates : Corrosive vapours.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No additional information available
10.4. Conditions to avoid
Direct sunlight. Heat. Sparks. Overheating. Open flame.
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products
Thermal decomposition generates : Corrosive vapours.

11. Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Fatal if inhaled.
Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/irritation : Serious eye damage, category 1, implicit
Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : May cause genetic defects.
Carcinogenicity : May cause cancer.
Reproductive toxicity : Suspected of damaging fertility.
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : Not classified
Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

12. Ecological information

12.1. Toxicity
Ecology - water : Very toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability
Chromium Trioxide (1333-82-0)
Persistence and degradability May cause long-term adverse effects in the environment.
12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
Chromium Trioxide (1333-82-0)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
12.6. Other adverse effects
No additional information available

13. Disposal considerations

13.1. Waste treatment methods
Product/Packaging disposal recommendations : Dispose of contents/container to ...
Additional information : Hazardous waste due to potential risk of explosion.
Ecology - waste materials : Hazardous waste due to toxicity

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN
14.1. UN number
UN-No. (ADR) : 1463
UN-No. (IMDG) : 1463
UN-No.(IATA) : 1463
UN-No.(ADN) : 1463
UN-No. (RID) : 1463
14.2. UN proper shipping name
Proper Shipping Name (ADR) : CHROMIUM TRIOXIDE, ANHYDROUS
Proper Shipping Name (IMDG) : CHROMIUM TRIOXIDE, ANHYDROUS
Proper Shipping Name (IATA) : CHROMIUM TRIOXIDE, ANHYDROUS
Proper Shipping Name (ADN) : CHROMIUM TRIOXIDE, ANHYDROUS
Proper Shipping Name (RID) : CHROMIUM TRIOXIDE, ANHYDROUS
Transport document description (ADR) : UN 1463 CHROMIUM TRIOXIDE,
ANHYDROUS, 5.1 (6.1+8), II, (E),
ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 1463 CHROMIUM TRIOXIDE,
ANHYDROUS, 5.1 (6.1+8), II,MARINE
POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 1463 CHROMIUM TRIOXIDE
, ANHYDROUS, 5.1, II,
ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 1463 CHROMIUM TRIOXIDE,
ANHYDROUS, 5.1 (6.1+8), II,
ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 1463 CHROMIUM TRIOXIDE,
ANHYDROUS, 5.1 (6.1+8), II,
ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)
ADR : Transport hazard class(es) (ADR) : 5.1 (6.1, 8)
Danger labels (ADR) : 5.1, 6.1, 8
IMDG : Transport hazard class(es) (IMDG) : 5.1 (6.1, 8)
Danger labels (IMDG) : 5.1, 6.1, 8
IATA : Transport hazard class(es) (IATA) : 5.1 (6.1, 8)
Hazard labels (IATA) : 5.1, 6.1, 8
AND : Transport hazard class(es) (ADN) : 5.1 (6.1, 8)
Danger labels (ADN) : 5.1, 6.1, 8
RID : Transport hazard class(es) (RID) : 5.1 (6.1, 8)
Danger labels (RID) : 5.1, 6.1, 8
14.4. Packing group
Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II
14.5. Environmental hazards
Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available
14.6. Special precautions for user
- Overland transport
Classification code (ADR) : OTC
Special provision (ADR) : 510
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2
Packing instructions (ADR) : P002,
IBC08 Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : MP2
Portable tank and bulk container instructions (ADR) : T3
Portable tank and bulk container special provisions (ADR) : TP33
Tank code (ADR) : SGAN
Tank special provisions (ADR) : TU3
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage – Packages (ADR) : V11
Special provisions for carriage - Loading,
unloading and handling (ADR) : CV24, CV28

Hazard identification number (Kemler No.) : 568
Orange plates : Tunnel restriction code (ADR) : E
EAC code : 1W
- Transport by sea
Limited quantities (IMDG) : 1 kg
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P002
Packing provisions (IMDG) : PP31
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B2, B4
Tank instructions (IMDG) : T3
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-Q
Stowage category (IMDG) : A
Segregation (IMDG) : SG6, SG16, SG19
MFAG-No : 141
- Air transport
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y544
PCA limited quantity max net quantity (IATA) : 2.5kg
PCA packing instructions (IATA) : 558
PCA max net quantity (IATA) : 5kg
CAO packing instructions (IATA) : 562
CAO max net quantity (IATA) : 25kg
ERG code (IATA) : 5CP
- Inland waterway transport
Classification code (ADN) : OTC
Special provisions (ADN) : 510
Limited quantities (ADN) : 1 kg
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 2
- Rail transport
Classification code (RID) : OTC
Special provision (RID) : 510
Limited quantities (RID) : 1kg
Excepted quantities (RID) : E2
Packing instructions (RID) : P002,IBC08
Special packing provisions (RID) : B4
Mixed packing provisions (RID) : MP2
Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special
provisions (RID) : TP33
Tank codes for RID tanks (RID) : SGAN
Special provisions for RID tanks (RID) : TU3
Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11
Special provisions for carriage – Loading and unloading (RID) : CW24, CW28
Colis express (express parcels) (RID) : CE10
Hazard identification number (RID) : 568
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the
substance or mixture
15.1.1. EU-Regulations
No REACH Annex XVII restrictions
Chromium trioxide is on the REACH Candidate List
Chromium trioxide is on the REACH Annex XIV List:
Authorisation number Sunset date REACH authorization exemptions
21/09/2017
15.1.2. National regulations
Germany
AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to
water (Classification according
to VwVwS, Annex 2; WGK No 328)
12th Ordinance Implementing the Federal
Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous
Incident Ordinance)
Denmark
Recommendations Danish Regulation : Young people below the age of 18 years are not

allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal
15.2. Chemical safety assessment
No additional information available

16. Other information

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic.
vPvB: very persistent and very bioaccumulative
Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
Further information : None.
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