Material Safety Data Sheet

VANADIUM PENTOXIDE LR (RXSOL-60-6605-813)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-813
Product Type	VANADIUM PENTOXIDE LR
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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Email	mail@rxmarine.com

2. Composition / informationon ingredients

2.1. Substance : VANADIUM PENTOXIDE LR
CAS No : 1314-62-1
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]
Specific target organ toxicity — Repeated H372
exposure, Category 1 Acute toxicity (inhal.), H332
Category 4 Acute toxicity (oral), H302
Category 4 Germ cell mutagenicity, H341
Category 2 Reproductive toxicity, H361
d Category 2 Specific target organ H335
toxicity — Single exposure,
Category 3, Respiratory tract irritation
Hazardous to the aquatic environment —
Chronic Hazard, Category 2 H411
Full text of classification categories and H statements : see section 16
Classification according to Directive 67/548/EEC or 1999/45/EC
Full text of R-phrases: see section 16
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): Xn: Harmful T : Very
toxic N : Dangerous for the environment
R Phrase(s):R20/22 Harmful by inhalation and if swallowed.
R37: Irritating to respiratory system.
R48/23 Toxic: danger of serious damage to health by prolonged exposure through
inhalation R51/53 : Toxic to aquatic organisms,
may cause long-term adverse effects in the aquatic environment.
R63: Possible risk of harm to the unborn child.
R68: Possible risk of irreversible effects.
S Phrase(s):S36/37 : Wear suitable protective clothing and gloves.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S45: In case of accident or if you feel unwell, seek medical advice
immediately (show the label where possible).
S61: avoid release to the environment . refer to

special instruction/safety data sheets.
Hazard pictograms

Signal word: Danger
Hazard statements: H302+
H332 - Harmful if swallowed or if inhaled
H335 - May cause respiratory irritation
H341 - Suspected of causing genetic defects
H361d - Suspected of damaging the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H411 - Toxic to aquatic life with long lasting effects
Precautionary statements: P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
3.3. Other hazards
No additional information available

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
Give oxygen orartificial respiration if necessary. If you feel unwell, seek medical advice.
First-aid measures after skin contact : Gently wash with plenty of soap and water.
If skin irritation occurs: Get medicaladvice/attention.
First-aid measures after eye contact : Remove contact lenses, if present and easy to do.
Continue rinsing. Rinse cautiouslywith water for several minutes.
If eye irritationpersists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries : Suspected of causing genetic defects.
Causes damage to organs through prolongedor repeated exposure.
Symptoms/injuries after inhalation : May cause respiratory irritation. Harmful if inhaled.
Symptoms/injuries after ingestion : Harmful if swallowed.
Chronic symptoms : Suspected of damaging the unborn child.
4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. Fire-fighting Measures

5.1. Extinguishing media
Suitable extinguishing media : dry chemical powder, alcohol-resistant foam,
carbon dioxide (CO2).
Unsuitable extinguishing media : Do not use a heavy water stream.
5.2. Special hazards arising from the substance or mixture
No additional information available
5.3. Advice for firefighters
Protection during firefighting : Do not attempt to
take action without suitable protective equipment.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
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 : Stop release.
6.2. Environmental precautions
Toxic to aquatic life with long lasting effects.
6.3. Methods and material for containment and cleaning up
Methods for cleaning up : Clear up rapidly by scoop or vacuum.
6.4. Reference to other sections
No additional information available

7. Handling and Storage

7.1. Precautions for safe handling
Precautions for safe handling : Obtain special instructions before use.
Use personal protective equipment asrequired.

Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a wellventilated area.
Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures : Do not eat, drink or smoke when using this product. Wash ...
thoroughly after handling.
7.2. Conditions for safe storage, including any incompatibilities
Storage conditions : Keep container tightly closed. Store in original container.
Store in a dry place. Protect from moisture.
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
Hand protection : protective gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : 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 : 690 °C
Freezing point : No data available
Boiling point : 1750 °C
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 : 6.3
Relative density : No data available
Density : 3.36 g/cm³
Solubility : Water: Slight (0.1-1%)
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available
9.2. Other information
No additional information available

10. Stability and reactivity

10.1. Reactivity
No additional information available
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. Air contact. Moisture.
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products
No additional information available

11. Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Inhalation: Harmful if inhaled.

Oral: Harmful if swallowed.
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Suspected of causing genetic defects.
Carcinogenicity : Not classified
Reproductive toxicity : Suspected of damaging the unborn child.
Specific target organ toxicity (singleexposure): May cause respiratory irritation. Specific target organ toxicity (repeatedexposure)
Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : Not classified
Potential adverse human health effectsand symptoms: Harmful if swallowed.

12. Ecological information

12.1. Toxicity
Ecology - water : Toxic to aquatic life with long lasting effects.
12.2. Persistence and degradability
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
No additional information available
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 ...

14. Transport information

In accordance with ADR / RID / IMDG / IATA / ADN
14.1. UN number
UN-No. (ADR) : 2862
UN-No. (IMDG) : 2862
UN-No.(IATA) : 2862
UN-No.(ADN) : 2862
UN-No. (RID) : 2862
14.2. UN proper shipping name
Proper Shipping Name (ADR) : VANADIUM PENTOXIDE
Proper Shipping Name (IMDG) : VANADIUM PENTOXIDE
Proper Shipping Name (IATA) : VANADIUM PENTOXIDE
Proper Shipping Name (ADN) : VANADIUM PENTOXIDE
Proper Shipping Name (RID) : VANADIUM PENTOXIDE
Transport document description (ADR) : UN 2862VANADIUM PENTOXIDE, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 2862 VANADIUM PENTOXIDE, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA) : UN 2862 VANADIUM PENTOXIDE, 6.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) : UN 2862 VANADIUM PENTOXIDE, 6.1, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) : UN 2862 VANADIUM PENTOXIDE, 6.1, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)
ADR : Transport hazard class(es) (ADR) : 6.1
Danger labels (ADR) : 6.1
IMDG : Transport hazard class(es) (IMDG) : 6.1
Danger labels (IMDG) : 6.1
IATA:Transport hazard class(es) (IATA) : 6.1
Hazard labels (IATA) : 6.1
AND:Transport hazard class(es) (ADN) : 6.1
Danger labels (ADN) : 6.1
RID:Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1
14.4. Packing group
Packing group (ADR) : III
Packing group (IMDG) : III
Packing group (IATA) : III
Packing group (ADN) : III
Packing group (RID) : III
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) : T5
Special provision (ADR) : 600
Limited quantities (ADR) : 5kg
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P002, IBC08, LP02, R001
Special packing provisions (ADR) : B3
Mixed packing provisions (ADR) : MP10
Portable tank and bulk container instructions (ADR): T1
Portable tank and bulk container special provisions (ADR): TP33
Tank code (ADR) : SGAH Tank special provisions (ADR) : TU15, TE19
Vehicle for tank carriage : AT Transport category (ADR) : 2
Special provisions for carriage - Bulk(ADR): VC1, VC2, AP7
Special provisions for carriage - Loading,
unloading and handling (ADR): CV13, CV28
Special provisions for carriage - Operation(ADR): S9
Hazard identification number (Kemler No.) : 60
Orange plates : Tunnel restriction code (ADR) : E EAC
code : 2X -
Transport by sea
Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P002, LP02 IBC
packing instructions (IMDG) : IBC08 IBC
special provisions (IMDG) : B3
Tank instructions (IMDG) : T1
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A EmS-No.
(Spillage) : S-A Stowage category
(IMDG) : A MFAG-No : 151 -
Air transport
PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y645
PCA limited quantity max net quantity (IATA): 10kg
PCA packing instructions (IATA) : 670
PCA max net quantity (IATA) : 100kg
CAO packing instructions (IATA) : 677
CAO max net quantity (IATA) : 200kg
ERG code (IATA) : 6L -
Inland waterway transport
Classification code (ADN) : T5
Special provisions (ADN) : 600, 802
Limited quantities (ADN) : 5 kg
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0 -
Rail transport
Classification code (RID) : T5
Special provision (RID) : 600
Limited quantities (RID) : 5kg
Excepted quantities (RID) : E1
Packing instructions (RID) : P002, IBC08, LP02, R001
Special packing provisions (RID) : B3
Mixed packing provisions (RID) : MP10
Portable tank and bulk container instructions (RID): T1
Portable tank and bulk container special provisions (RID): TP33
Tank codes for RID tanks (RID) : SGAH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage – Bulk (RID): VC1, VC2, AP7
Special provisions for carriage –
Loading and unloading (RID): CW13, CW28, CW31
Colis express (express parcels) (RID) : CE11
Hazard identification number (RID) : 60

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 VANADIUM PENTOXIDE is not on the
REACH Candidate List VANADIUM PENTOXIDE is not on the REACH Annex XIV List
15.1.2. National regulations
Germany
12th Ordinance Implementing the Federal
Immission Control Act - 12.BImSchV: Is not subject of the 12. BlmSchV (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. In accordance with REACH
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