

1. Product and Company Identification

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Product Name PALLADIUM NITRATE 44% PD content

Part Number RXSOL-60-6605-164

Company Details:

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

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Website www.rxmarine.com

2. Composition / Information on ingredients

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Chemical Name	CAS	EC number	Weight
PALLADIUM NITRATE 44% PD content	7697-37-2	231-714-2	230,43 g/mol

3. Hazards Identification

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Signal Word	Danger
Hazard Statements	H271 May cause fire or explosion; strong oxidizer. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.
P280 Wear protective gloves.P305 + P351 + P338 Precautionary statements - response	NA P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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. Continuerinsing.
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

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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:	NA
Ingestion:	NA
Notes to Physician	NA
If 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.
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

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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	Nitrogen oxides (NOx) Not combustible. Has a fire-promoting effect due to release of oxygen. 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 keeping a safe distance or by wearing suitable protective clothing.
Protective Equipment	NA
Specific Hazards Arising from the Chemical	NA

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
Spillage	NA
Personal Protection	NA
Environmental 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 with liquid-absorbent material (e.g. Chemizorb®).Dispose of properly. Clean up affected area.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

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Advice on safe handling	NO
Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Precautions for safe handling	NA
Conditions for safe storage, including any incompatibilities	Storage conditions No metal containers. Tightly closed. Separately or together with other oxidising substances only and away from sources of ignition and heat.Because of their oxidation potential these products can raise the burning rate of combustible substances substantially or ignite combustible substances on contact with them.
Storage conditions	NA
Storage conditions	NA
Storage class	Storage class (TRGS 510): 5.1A: Strongly oxidizing 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

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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	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contactwith this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.The selected protective gloves have to satisfy the specifications of Regulation (EU)2016/425 and the standard EN 374 derived from it.Full contact

Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, email sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

required when vapours/aerosols 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.

Other Protection Measure

Recommended Filter type: Filter type ABEK The entrepreneur 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.

Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

Thermal hazards

Do not let product enter drains.

No data available



Gloves Suit

9. Physical and chemical properties

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Physical state	Liquid
Colour	Brown
Odour	No data available
Odor Threshold	Not Applicable
pH	Not Applicable
Melting Point	No data available
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	at 20 °C soluble
Ignition temperature	No information available.
Particle characteristics	No data available

10. Stability and reactivity

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Reactivity	No data available
Stability	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	Violent reactions possible with: The generally known reaction partners of water.
Conditions to avoid	No data available
Incompatible materials	Bases, Alkali metals, Acetic anhydride, Iron, Copper, Amines, Reducing agents, Organic materials, Alcohols, Brass, Aluminum, Corrodes steel., Acetonitrile, AcrylonitrileMetals
Hazardous Polymerization	In the event of fire: see section 5

11. Toxicological information

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Acute toxicity	Oral: No data available Aldrich- 380040 Page 9 of 14 The life science business of Merck operates as MilliporeSigma in the US and Canada Acute toxicity estimate Inhalation - 4 h - 2,65 mg/l - vapor (Expert judgment) Dermal: No data available
Skin corrosion/irritation	Skin - Rabbit Result: Causes severe burns. Remarks: (IUCLID) Causes poorly healing wounds..
Serious eye damage/eye irritation	Eyes - Rabbit Result: Causes burns. Remarks: (IUCLID) Causes serious eye damage.
Respiratory or skin sensitization	Maximization Test - Guinea pig
Rout Of Entry	NA
Toxicity to Animal	NA
Toxic Effects on Human	NA
Germ cell mutagenicity	Test Type: Ames test Test system: Salmonella typhimurium Result: negative
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	NA
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. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.
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. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice

12. Ecological information

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Persistence and degradability	No data available
Toxicity	NA
Bioaccumulative potential	No data available
Toxicity to fish	Semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 0,306 mg/l - 96 h (OECD Test Guideline 203) Remarks: The value is given in analogy to the following substances: diamminedichloropalladium
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 0,069 mg/l - 48 h (OECD Test Guideline 202) Remarks: The value is given in analogy to the following substances: diamminedichloropalladium
Toxicity to algae	Static test ErC50 - Pseudokirchneriella subcapitata - 0,058 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: diamminedichloropalladium static test NOEC - Pseudokirchneriella subcapitata - 0,002 mg/l - 72 h (OECD Test Guideline 201) Remarks: The value is given in analogy to the following substances: diamminedichloropalladium
Toxicity to bacteria	static test EC50 - activated sludge - 61 mg/l - 3 h (OECD Test Guideline 209) Remarks: The value is given in analogy to the following substances: diamminedichloropalladium static test NOEC - activated sludge - 18 mg/l - 3 h (OECD Test Guideline 209) Remarks: The value is given in analogy to the following substances: diamminedichloropalladium
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. Aldrich- 380040 Page 11 of 14 The life science business of Merck operates as MilliporeSigma in the US and Canada Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	No data available

13. Disposal considerations

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Disposal methods	NA
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Contaminated packaging	NA
Waste treatment Method	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

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UN number	ADR/RID: 2031 IMDG: 2031 IATA: 2031
UN proper shipping name	ADR/RID: NITRIC ACID IMDG: NITRIC ACID IATA: Nitric acid
Transport hazard class(es)	ADR/RID: 8 IMDG: 8 IATA: 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	NA
Transport in bulk according to IMO instruments	No data available

15. Regulatory information

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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.
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. OXIDISING LIQUIDS AND SOLIDS OXIDISING LIQUIDS AND SOLIDS ENVIRONMENTAL HAZARDS
DSCL (EEC)	NA
Other regulations	Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

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Other Information	<p>he 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.</p> <p>DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage,</p>
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