

## 1. Product and Company Identification

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Part Number RXSOL-60-6605-163  
Product Name PALLADIUM HYDROXIDE 20% ON  
CHARCOAL

### Company Details:

RX MARINE INTERNATIONAL  
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## 2. Composition / Information on ingredients

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Chemical Name	CAS	EC number	Weight	Formula
PALLADIUM HYDROXIDE 20% ON CHARCOAL	12135-22-7	235-219-2	---	H2O2Pd

## 3. Hazards Identification

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Signal Word	Warning
Classification of the substance or mixture	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
Label elements	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
Precautionary statements - response	NA
Disposal	NA
Prevention	NA
Supplemental Hazard Statements	None
Other hazards bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.	Other hazards This substance/mixture contains no components considered to be either persistent

## 4. First Aid Measures

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General advice	NA
If inhaled	After inhalation: fresh air
Eye Contact	After eye contact: rinse out with plenty of water. Remove contact lenses
Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

Ingestion	Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.
Notes to Physician	Treat symptomatically
If swallowed	Immediately make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects, both acute and delaye	No data available
Indication of any immediate medical attention and special treatment needed	No data available

## 5. Fire-fighting Measures

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Flammability	May be combustible at high temperature.
Flash Point	CLOSED CUP: Higher than 93.3°C (200°F).
Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given
Special hazards arising from the substance or mixture	Carbon oxides Mixture with combustible ingredients. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Further information	NA
Hazardous combustion products	NA
Advice for firefighters	NA
Protective Equipment	Use personal protective equipment.
Specific Hazards Arising from the Chemical	Has a fire-promoting effect due to the release of oxygen. Ambient fire may liberate hazardous vapours.

## 6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures	Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Spillage	Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal.
Personal Protection	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8.
Environmental Precaution	Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning	Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7. Handling and Storage

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Advice on safe handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
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Advice on protection against fire and explosion	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2.
Precautions for safe handling	Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Store under inert gas. Air sensitive
Storage conditions	Tightly closed. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. Light sensitive. Moisture sensitive.
Storage conditions	Tightly closed. Dry
Storage class	Storage class (TRGS 510): 13: Non Combustible Solids
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	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk elimination area
Engineering Control	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Eye/face protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Body Protection	Impervious clothing, 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
Respiratory protection	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Control of environmental exposure	Do not let product enter drains.
Thermal hazards	No data available





Gloves Suit

## 9. Physical and chemical properties

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Physical state	Powder with lumps
Colour	black
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	DMSO (Slightly), Water (Slightly)
Ignition temperature	No information available.
Particle characteristics	No data available
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available

## 10. Stability and reactivity

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Reactivity	No data available
Stability	Stable under recommended storage conditions. Contains the following stabilizer(s): water (50 %)
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	acids, Alcohols, Oxidizing agents, Sulfur compounds
Hazardous Polymerization	In the event of fire: see section 5

## 11. Toxicological information

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Acute toxicity	Oral No data available Inhalation: No data available Dermal: No data available
Skin corrosion/irritation	Remarks: No data available
Serious eye damage/eye irritation	No data available

Respiratory or skin sensitization	No data available
Rout Of Entry	Inhalation. Ingestion.
Toxicity to Animal	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE Acute oral toxicity (LD50): 689 mg/kg [Rat].
Toxic Effects on Human	May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).
Germ cell mutagenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Special Remarks on other Toxi Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism.
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. RTECS: OD2800000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. 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. RTECS: DK2625000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Damage to the eyes. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidenc

## 12. Ecological information

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Persistence and degradability	No data available
Toxicity Fish	Semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - 0,154 mg/l - 96 h (Palladium hydroxide on activated charcoal) (OECD Test Guideline 203)
Bioaccumulative potential	No data available
Toxicity to fish	Flow-through test LC50 - Oryzias latipes - > 95,4 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 0,03519 mg/l - 48 h (Palladium hydroxide on activated charcoal) (OECD Test Guideline 202)
Toxicity to algae	Static test ErC50 - SELENASTRUM - > 998 mg/l - 72 h (OECD Test Guideline 201)
Eco Toxicity	Not Available
COD and BOD 5	Not Available
Products Biodegradation:	The methods for determining the biological degradability are not applicable to inorganic substances.
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

Endocrine disrupting properties	bioaccumulative (vPvB) 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

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Disposal methods	The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.
Contaminated packaging	Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
Waste treatment Method	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

### 14. Transport information

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UN number	ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.)
UN proper shipping name	IATA: Not dangerous goods. (For reference only, please check.) ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.)
Transport hazard class(es)	IATA: Not dangerous goods. (For reference only, please check.) ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.)
Packaging group	IATA: Not dangerous goods. (For reference only, please check.) ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.)
Environmental hazards	IATA: Not dangerous goods. (For reference only, please check.) ADR/RID: No IMDG: No
Special precautions for user	IATA: No No data available
Further information	Not classified as dangerous in the meaning of transport regulations.
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 NA question	
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. : ACUTE TOXIC : ENVIRONMENTAL HAZARDS
DSCL (EEC)	R8- Contact with combustible material may cause fire. R20/22- Harmful by inhalation and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R42/43- May cause sensitization by inhalation and skin contact. S22- Do not breathe dust. S24- Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves.
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>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 we 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><b>DISCLAIMER OF LIABILITY :</b>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, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.</p>
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