

## 1. Product and Company Identification

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Product Name Phosphorus Pentasulfide  
Part Number RXSOL-19-7704-200

### Company Details:

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

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Chemical Name	Cas No	EC No	Weight	Formula
di-Phosphorus pentasulfide for synthesis	1314-80-3	215-242-4	444,54 g/mol	P <sub>2</sub> S <sub>5</sub>

## 3. Hazards Identification

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Signal Word	Danger
Hazard Statements	H228 Flammable solid. H260 In contact with water releases flammable gases which may ignite spontaneously. H302 + H332 Harmful if swallowed or if inhaled. H400 Very toxic to aquatic life.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P223 Do not allow contact with water. P231 + P232 Handle and store contents under inert gas. Protect from moisture. P273 Avoid release to the environment. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
Classification of the substance or mixture	No data available
Supplemental Hazard Statements	No data available
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. Immediately call in physician. If breathing stops immediately apply artificial respiration, if necessary also oxygen.
Eye Contact	In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

Swallowed	After swallowing immediately make victim drink water (two glasses at most). Consult a physician.
Skin Contact	In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water/ shower.
Inhalation	No data available
Ingestion	No data available
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	No data available
Suitable extinguishing media	Carbon dioxide (CO2) Sand Dry powder Cement
Unsuitable extinguishing media	Foam Water
Special hazards arising from the substance or mixture	Sulfur oxides Oxides of phosphorus Combustible. hydrogen sulphide Fire may cause evolution of: Sulfur oxidesOxides of phosphorus May not get in touch with: Water Development of hazardous combustion gases or vapours possible in the event of fire.
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	No data available
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus
Protective Equipment	No data available
Specific Hazards Arising from the Chemical	No data available

## 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. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Spillage	No data available
Personal Protection	No data available
Enviromental Precaution	Do not let product enter drains. Risk of explosion.
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 protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge
Incompatible materials	No data available
Hygiene measures	Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2
Advice on safe handling	Work under hood. Do not inhale substance/mixture. Keep workplace dry. Do not allow product to come into contact with water.
Conditions for safe storage, including any incompatibilities	No data available

Storage conditions	Tightly closed. Keep away from heat and sources of ignition. Never allow product to get in contact with water during storage. Recommended storage temperature see product label.
Storage class	Storage class (TRGS 510) 4.3 Hazardous materials, which set free flammable gases upon contact with water
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	No data available

## 8. Exposure controls and personal protection

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Exposure controls	Personal protective equipment
Engineering Control	No data available
Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
Body Protection	Flame retardant antistatic 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 other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: <a href="http://www.kcl.de">www.kcl.de</a> ). Full contact Material: Viton® Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M) 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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: <a href="http://www.kcl.de">www.kcl.de</a> ). Splash contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break through time: 30 min Material tested: Butoject® (KCL 898)
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 P3 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.
Other Protection Measure	No data available

## 9. Physical and chemical properties

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Physical state	Powder
Colour	Yellow
Odour	Stench.
Odor Threshold	No data available
pH	No data available
Melting Point	286 - 290 °C
Boiling Point	514 °C at 1.013 hPa
Flash Point	No data available
Evaporation Rate	No data available
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	1 hPa at 300 °C
Viscosity	No data available
Density	2,090 g/cm <sup>3</sup>
Relative Density	No data available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	No data available
Solubility	No data available
Ignition temperature	No data available
Particle characteristics	No data available

## 10. Stability and reactivity

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Reactivity	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed
Chemical stability	sensitive to moisture
Possibility of hazardous reactions	No data available
Conditions to avoid	Risk of explosion with Water Oxidizing agents Alcohols
Incompatible materials	No data available
Hazardous product decomposition	No data available

## 11. Toxicological information

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Acute toxicity	LD50 Oral - Rat - 389 mg/kg LC50 Inhalation - 4 h - 1,5 mg/l - dust/mist LD50 Dermal - Rabbit - 3.160 mg/kg Remarks: Prolonged skin contact may cause skin irritation and/or dermatitis.
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Carcinogenicity	No data available
Germ cell mutagenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity- single exposure	No data available
Additional Information	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. Cough, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., Hydrogen sulfide is strongly bound to methemoglobin in a manner similar to cyanide. Toxicologically, its reaction with enzymes in the blood stream inhibits cell respiration resulting in pulmonary paralysis, sudden collapse, and death. It is recognized by its characteristic odor of "rotten eggs". The detectable, minimum perceptible odor occurs at 0.13ppm, rapid olfactory fatigue can occur at high concentrations (>100 ppm). At concentrations of 20ppm hydrogen sulfide begins acting as an irritant on the mucous membranes of the eyes and respiratory tract and increases with concentration and exposure time. Eye irritation is characterized by irritation of the conjunctiva with photophobia to keratoconjunctivitis and vesiculation of the cornea epithelium. Prolonged exposure to moderate concentrations (250ppm) may cause pulmonary edema. At concentrations over 500ppm, drowsiness, dizziness, excitement, headache, unstable gait, and other systemic symptoms occur within a few minutes. Sudden loss of consciousness without premonition, anxiety, or sense of struggle are characteristic of acute exposure at

concentrations above 700ppm. At concentrations of 1000-2000ppm hydrogen sulfide is rapidly absorbed through the lung into the blood. In this range a single inhalation may cause coma and may be rapidly fatal. Initially hyperpnea occurs, followed by rapid collapse and respiratory inhibition. At higher concentrations, hydrogen sulfide exerts an immediate paralyzing effect on the respiratory centers. When concentration reaches 5000ppm, imminent death almost always results.

## 12. Ecological information

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Persistence and degradability	Readily biodegradable.
Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity	No data available
Toxicity to bacteria	No data available
Toxicity to algae	No data available
Products Biodegradation	No data available
Mobility in soil	No data available
Results of PBT and PvB 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.
Other adverse effects	No data available

## 13. Disposal considerations

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Product	See <a href="http://www.retrologistik.com">www.retrologistik.com</a> for processes regarding the return of chemicals and containers, or contact us there if you have further questions.
Contaminated packaging	No data available
Waste treatment Method	No data available

## 14. Transport information

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UN number	ADR/RID:1340 IMDG:1340 IATA:1340
UN proper shipping name	ADR/RID: PHOSPHORUS PENTA IMDG:PHOSPHORUS PENTASULPHIDE IATA: PHOSPHORUS PENTASULPHIDE
Transport hazard classess	ADR/RID:4.3 (4.1) IMDG:4.3 (4.1) IATA: 4.3 (4.1)
Packaging group	ADR/RID:II IMDG:II IATA:II
Environmental hazards	ADR/RID:Yes IMDG Marine pollutant:Yes IATA: No
Special precautions for user	Tunnel restriction code (D/E)
Further information	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
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.

## 16. Other information

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### Other Information

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