# Material Safety Data Sheet

**PHENOLPHTHALEIN TS** (RXSOL-60-6121-030)

## 1. Product and Company Identifaction

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| Product Name | PHENOLPHTHALEIN TS |
| Product Type | RXSOL-60-6121-030 |

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

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|---|---|
| Phone | +91 22 65113333/ 5555 / 9999 / 27611360 / 27815540 |
| Fax | +91 22 2781 1318 :::AOH :0091 9322594669 |
| Email | mail@rxmarine.com |

## 2. Composition / informationon ingredients

Composition:

| Name | CAS | % by Weight |
|---|---|---|
| Distilled Water | 7732-18-5 | 5.0 |
| Ethyl alcohol 200 Proof | 64-17-5 | 94 |
| Phenolphthalein, Powder | 77-09-8 | 1 |

## 3. Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Slightly hazardous in case of skin contact (permeator). Non-corrosive for skin. Non-corrosive to the eyes. Non-corrosive for lungs.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified PROVEN by State of California Proposition 65 [Ethyl alcohol 200 Proof]. Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof]. Classified 1 (Clear evidence.) by NTP[Phenolphthalein, powder]. Classified 2B (Possible for human.) by IARC [Phenolphthalein, powder]. MUTAGENIC EFFECTS:
Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200Proof]. Mutagenic for mammalian somatic cells. [Phenolphthalein, powder]. TERATOGENIC EFFECTS: Classified PROVEN
for human [Ethyl alcohol 200 Proof].
DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/male [POSSIBLE] [Ethyl alcohol 200 Proof]. The substance is toxic to blood,the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS). The substance may be toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage.

## 4. First Aid Measures

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| Eye Contact: | Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention. |
| Skin Contact: | In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. |
| Serious Skin Contact: | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention. |

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| Inhalation: | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear. |
| Serious Inhalation: | Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention. |
| Ingestion: | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar,tie, belt or waistband. |
| Serious Ingestion: | Not available. |

## 5. Fire-fighting Measures

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| Flammability of the Product: | Flammable. |
| Auto-Ignition Temperature: | The lowest known value is 363°C (685.4°F) (Ethyl alcohol 200 Proof). |
| The lowest known value is CLOSED CUP: | 12.78°C (55°F). OPEN CUP: 12.78°C (55°F). (Cleveland). (Ethyl alcohol200Proof) |
| Flammable Limits: | The greatest known range is LOWER: 3.3% UPPER: 19% (Ethyl alcohol200 Proof) |
| Products of Combustion: | These products are carbon oxides (CO, CO2). |
| Fire Hazards in Presence of Various Substances: | Highly flammable in presence of open flames and sparks, of heat. Slightly flammable to flammable in presence of oxidizing materials. Non-flammable in presence of shocks, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture. |
| Explosion Hazards in Presence of Various Substances: | Slightly explosive in presence of oxidizing materials, of acids. Non-explosive in presence of open flames and sparks, of shocks. |
| Fire Fighting Media and Instructions: | Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam,water spray or fog. |
| Special Remarks on Fire Hazards: | Containers should be grounded. CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME Vapor may travel considerable distance to source of ignition and flash back. (Ethyl alcohol 200 Proof) |
| Special Remarks on Explosion Hazards: | Ethanol has an explosive reaction with the oxidized coating around potassium metal. Ethanol ignites and then explodes on contact with acetic anhydride + sodium hydrosulfate (ignites and may explode), disulfuric acid + nitric acid, phosphorous(III)oxide platinum, potassium-tert-butoxide+ acids. Ethanol forms explosive products in reaction with the following compound :<br>ammonia + silver nitrate (forms silver nitride and silver fulminate), iodine + phosphorus (forms ethane iodide), magnesium<br>perchlorate (forms ethyl perchlorate), mercuric nitrate, nitric acid + silver (forms silver fulminate) silver nitrate (forms ethyl nitrate) silver(I) oxide + ammonia or hydrazine (forms silver nitride and silver fulminate), sodium (evolves hydrogen gas). (Ethyl alcohol 200 Proof) |

## 6. Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:
Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth,sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## 7. Handling and Storage

Precautions:
Keep locked up. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage:
Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

## 8. Exposure controls and personal protection

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| Engineering Controls: | Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location. |
| Personal Protection: | Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.<br>Personal Protection in Case of a Large Spill:<br>Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. |
| Personal Protection in Case of a Large Spill: | Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. |
| Exposure Limits: | Ethyl alcohol 200 Proof TWA: 1000 (ppm) from ACGIH (TLV) [United States] [1999] TWA: 1000 (ppm) from OSHA (PEL)<br>[United States] TWA: 1900 (mg/m3) from OSHA (PEL) [United States] TWA: 1000 (ppm) from NIOSH TWA: 1000 (ppm)<br>[United Kingdom (UK)] TWA: 1920 (mg/m3) [United Kingdom (UK)] TWA: 1000 STEL: 1250 (ppm)<br>[Canada]Consult local authorities for acceptable exposure limits. |

## 9. Physical and chemical properties

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| Physical state and appearance: | Liquid. |
| Odor: | Not available. |
| Taste: | Not available. |
| Molecular Weight: | Not applicable. |
| pH (1% soln/water): | Neutral. |
| Boiling Point: | The lowest known value is 78.5°C (173.3°F) (Ethyl alcohol 200 Proof). Weighted average: 79.58°C (175.2°F) |
| Melting Point: | May start to solidify at -114.1°C (-173.4°F) based on data for: Ethyl alcohol 200 Proof. |
| Critical Temperature: | The lowest known value is 243°C (469.4°F) (Ethyl alcohol 200 Proof). |
| Specific Gravity: | Weighted average: 0.8 (Water = 1) |
| Vapor Pressure: | The highest known value is 5.7 kPa (@ 20°C) (Ethyl alcohol 200 Proof). Weighted average: 5.53 kPa (@20°C) |
| Vapor Density: | The highest known value is 1.59 (Air = 1) (Ethyl alcohol 200 Proof). Weighted average: 1.54 (Air = 1) |
| Volatility: | Not available. |
| Odor Threshold: | The highest known value is 100 ppm (Ethyl alcohol 200 Proof) |
| Water/Oil Dist. Coeff.: | Not available. |
| Ionicity (in Water): | Not available. |
| Dispersion Properties: | See solubility in water, methanol, diethyl ether, acetone. |
| Solubility: | Easily soluble in cold water, hot water, methanol, diethyl ether. Soluble in acetone. |

## 10. Stability and reactivity

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| Stability: | The product is stable. |
| Instability Temperature: | Not available. |
| Conditions of Instability: | Incompatible materials, heat, sources of ignition. (Ethyl alcohol 200 Proof) |
| Incompatibility with various substances: | Reactive with oxidizing agents, acids, alkalis. |
| Corrosivity: | Non-corrosive in presence of glass. |

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| Special Remarks on Reactivity: | Ethanol rapidly absorbs moisture from the air. Can react vigorously with oxiders. The following oxidants have been demonstrated to undergo vigorous/explosive reaction with ethanol: barium perchlorate, bromine pentafluoride, calcium hypochlorite, chloryl perchlorate, chromium trioxide, chromyl chloride, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate,hydrogen peroxide, iodine heptafluoride, nitric acid nitrosyl perchlorate, perchloric acid permanganic acid, peroxodisulfuric acid, potassium dioxide, potassium perchlorate, potassium permanganate, ruthenium(VIII) oxide, silver perchlorate, silver peroxide, uranium hexafluoride, uranyl perchlorate. Ethanol reacts violently/expodes with the following compounds: acetyl bromide (evolves hydrogen bromide) acetyl chloride, aluminum, sesquibromide ethylate, ammonium hydroxide & silver oxide, chlorate, chromic anhydride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, hydrogen peroxide + sulfuric acid, iodine + methanol + mercuric oxide, manganese perchlorate + 2,2-dimethoxy propane, perchlorates,permanganates + sulfuric acid, potassium superoxide, potassium tert-butoxide, silver & nitric acid, silver perchlorate, sodium hydrazide, sulfuric acid + sodium dichromate, tetrachlorisilane + water. Ethanol is also incompatible with platinium, and sodium. (Ethyl alcohol 200 Proof) |
| Special Remarks on Corrosivity: | Not available. |
| Polymerization: | Will not occur. |

## 11. Toxicological information

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| Routes of Entry: | Absorbed through skin. Eye contact. Inhalation. |
| Toxicity to Animals: | Acute oral toxicity (LD50): 3450 mg/kg [Mouse]. (Ethyl alcohol 200 Proof). |
| Chronic Effectson Humans: | CARCINOGENIC EFFECTS: Classified PROVEN by State of California Proposition 65 [Ethyl alcohol 200 Proof]. Classified<br>A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof]. Classified 1 (Clear evidence.) by NTP [Phenolphthalein, powder]. Classified 2B (Possible for human.) by IARC [Phenolphthalein, powder]. MUTAGENIC EFFECTS:<br>Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200<br>Proof]. Mutagenic for mammalian somatic cells. [Phenolphthalein, powder]. TERATOGENIC EFFECTS: Classified PROVEN<br>for human [Ethyl alcohol 200 Proof]. DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethyl alcohol<br>200 Proof]. Classified Reproductive system/toxin/male [POSSIBLE] [Ethyl alcohol 200 Proof]. Contains material which may cause damage to the following organs: kidneys. |
| Other Toxic Effects on Humans: | Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). |
| Special Remarks on Toxicity to Animals: | Not available. |
| Special Remarks on Chronic Effects on Humans: | May affect genetic material (mutagenic) Causes adverse reproductive effects and birth defects (teratogenic) , based on moderate to heavy consumption. May cause cancer based on animal data. Human: passes through the placenta, excreted in<br>maternal milk. (Ethyl alcohol 200 Proof) |
| Special Remarks on other Toxic Effects on Humans: | Acute potential health effects: Skin: causes skin irritation Eyes: causes eye irritation Ingestion: May affect behavior. Moderately toxic and narcotic in high concentrations. May affect metabolism, gastrointestinal tract, blood, liver. May affect respiratory tract, cardiovascular and urinary systems. Experimentaly tumorigen. Inhalation: May cause irritation of the respiratory tract, headache, drowsiness, nausea, narcosis. (Ethyl alcohol 200 Proof) |

## 12. Ecological information

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| Ecotoxicity: | Not available. |
| BOD5 and COD: | Not available. |
| Products of Biodegradation: | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| Toxicity of the Products of Biodegradation: | The products of degradation are less toxic than the product itself. |
| Special Remarks on the Products of Biodegradation: | Not available. |

## 13. Disposal considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## 14. Transport information

DOT Classification:
CLASS 3: Flammable liquid.

Identification: :
Ethanol (Ethyl alcohol 200 Proof) UNNA: 1170 PG: II

Special Provisions for Transport:
Not available.

## 15. Regulatory information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm,which would require a warning under the statute: Ethyl alcohol 200 Proof;
Phenolphthalein, powder California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethyl alcohol 200 Proof California prop. 65:This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethyl alcohol 200 Proof; Phenolphthalein, powder Rhode Island RTK hazardous substances:
Ethyl alcohol 200 Proof Pennsylvania RTK: Ethyl alcohol 200 Proof Florida: Ethyl alcohol 200 Proof Massachusetts RTK: Ethyl alcohol 200 Proof New Jersey: Ethyl alcohol 200 Proof TSCA 8(b) inventory: Water; Ethyl alcohol 200 Proof; Phenolphthalein,powder

Other Regulations: OSHA:
Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:
WHMIS (Canada):
CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2A: Material causing other toxic effects(VERY TOXIC).

DSCL (EEC):
R11- Highly flammable. R22- Harmful if swallowed. R45- May cause cancer. S2- Keep out of the reach of children. S46-If swallowed, seek medical advice immediately and show this container or label. S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):
Health Hazard: 2
Fire Hazard: 3
Reactivity: 0
Personal Protection: h
National Fire Protection Association (U.S.A.):
Health: 2
Flammability: 3
Reactivity: 0
Specific hazard:

Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## 16. Other information

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

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