

## 1. Product and Company Identification

www.rxmarine.com

Product Name : N Propyl Bromide (NPB)

Part Number : RXSOL-18-1574-250

### Company Details:

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

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| Name of Substance | Cas Number | Wt. % |
|-------------------|------------|-------|
| N-Propyl bromide  | 106-94-5   | 100 % |

## 3. Hazards Identification

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Signal Word

Danger

Hazard Statements

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H360 May damage fertility or the unborn child .sively proven that no other routes of exposure cause the hazard>.  
H373 May cause damage to organs .ted exposure .

Precautionary statements - prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. ☒ No smoking.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements -response

Inhalation : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Skin : If skin irritation occurs: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse. Eyes : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Fire: In case of fire: Use CO2, dry chemical, or foam for extinction. Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed Disposal : Dispose of contents/container to an approved waste disposal plant

## 4. First Aid Measures

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Skin Contact

Flush skin with water after contact. Wash contaminated clothing before reuse.

|                                 |  |
|---------------------------------|--|
| Eye Contact                     | Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  |
| Inhalation:                     | If inhaled, If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.                                  |
| Ingestion:                      | If swallowed, do not induce vomiting. Allow victim to rinse his mouth and then to drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Call a physician. |
| Most important symptoms/effects | Breathing difficulties. . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting  |

## 5. Fire-fighting Measures

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|                              |  |
|------------------------------|--|
| Flammability                 | Flammable.   |
| Flash Point                  | CLOSED CUP: 22°C   |
| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water Spray, Foam, Dry Chemical, CO2. Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. |
| Protective Equipment         | Use personal protective equipment.   |
| Advice for firefighters      | Wear self-contained breathing apparatus. Wear full protective equipment.   |

## 6. Accidental Release Measures

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|  |   |
|--|---|
| Small Spillage                                     | Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.  |
| Personal Protection                                | Remove persons to safety. Wear breathing apparatus if exposed to vapours/dust/spray/gases.  |
| Environmental Precaution                           | Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.  |
| Methods and materials for containment and cleaning | 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. |

## 7. Handling and Storage

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|  |   |
|--|---|
| Handling                               | Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Use explosion-proof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges. |
| 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)  |
| Advice on general occupational hygiene | Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas.   |

## 8. Exposure controls and personal protection

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|                     |   |
|---------------------|---|
| Engineering Control | 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 |
|---------------------|---|

Personal Protection

work-station location.

Eye/Face Protection : Wear coverall chemical splash goggles or safety glasses.

Respirators : Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Protective Clothing Where there is potential for skin contact have available and wear as appropriate Impervious gloves, apron, pants, hood and jacket.

Exposure Limits:

N Propyl Bromide

TLV (ACGIH).....0.1 PPM

AEL\* (Innospec Fuel Specialties) .....None established

Other Protection Measure

Handle in accordance with good industrial hygiene and safety practice.



Gloves Suit

9. Physical and chemical properties

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|  |                            |
|--|----------------------------|
| Form                                   | Liquid                     |
| Colour                                 | Clear                      |
| Odour                                  | Aromatic                   |
| Boiling point and boiling range        | 71°C / 159.8 °F @ 760 mmHg |
| Flash Point                            | 22°C (Close Cup)           |
| Melting Point                          | -110 °C                    |
| Specific Gravity (20 °C)               | 1.353 (Water = 1)          |
| pH                                     | Not Applicable             |
| Evaporation Rate                       | No information available   |
| Solubility                             | No information available   |
| Flammability (solid,gas)               | Not Applicable             |
| Flammability or explosive limits       | Not Available              |
| Vapor Pressure                         | 146 mmHg @ 20 °C           |
| Vapour density                         | 4.34 (Air = 1.0)           |
| Partition coefficient; n-octanol/water | No data available          |
| Autoignition Temperature               | 490 °C / 914 °F            |
| Viscosity                              | 0.52 mPa.s at 20 °C        |
| Molecular Formula                      | C3 H7 Br                   |
| Molecular Weight                       | 122.99                     |

10. Stability and reactivity

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|                               |   |
|-------------------------------|---|
| Recativity                    | None known, based on information available  |
| Stability                     | Stable at normal temperatures and storage conditions.                                       |
| Conditions to Avoid           | Keep away from open flames, hot surfaces and sources of ignition.<br>Incompatible products. |
| Incompatible materials        | Strong oxidizing agents, Strong bases, Metals   |
| Hazardous combustion products | Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides                                |

**11. Toxicological information**[www.rxmarine.com](http://www.rxmarine.com)

|   |   |
|---|---|
| Routes of Entry                               | Absorbed through skin. Eye contact. Inhalation. Ingestion.  |
| Toxicity to Animals:                          | WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute toxicity of the vapor   |
| Chronic Effects on Humans:                    | May cause damage to the following organs: blood, liver, central nervous system (CNS).   |
| 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:       | Lowest Published Lethal Dose/Conc: LDL [Rat] - Route: Oral; Dose: 4000 mg/kg  |
| Special Remarks on Chronic Effects on Humans: | May cause adverse reproductive effects based on animal test data Special Remarks on other Toxic Effects on Humans:  |
| Acute Potential Health Effects:               | Skin: Causes eye irritation. Eyes: Causes eye irritation. Inhalation: It may cause respiratory tract and mucous membrane irritation and may affect respiration. Vapors may cause dizziness and suffocation. Inhalation of high concentrations may affect behavior/central nervous system (CNS depression) characterized by nausea, headache, dizziness, somnolence, unconsciousness and coma. It may also cause liver and kidney damage, lung injury, weight loss/ anorexia, bone marrow changes, and blood abnormalities |

**12. Ecological information**[www.rxmarine.com](http://www.rxmarine.com)

|                               |   |
|-------------------------------|---|
| Ecotoxicity                   | Not Available   |
| Bioaccumulation/ Accumulation | 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. |

**13. Disposal considerations**[www.rxmarine.com](http://www.rxmarine.com)

|                |   |
|----------------|---|
| Remarks        | Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. |
| Waste Disposal | Waste should be disposed of in according to local rule and regulation.  |

**14. Transport information**[www.rxmarine.com](http://www.rxmarine.com)

|                      |                  |
|----------------------|------------------|
| DOT                  |                  |
| UN Number            | 2344             |
| Proper shipping name | Bromopropanes    |
| Hazard Class         | 3                |
| DOT Labs             | Flammable Liquid |
| Packing group        | II               |
| TDG                  |                  |

|                      |                  |
|----------------------|------------------|
| UN Number            | 2344             |
| Proper shipping name | Bromopropanes    |
| Hazard Class         | 3                |
| TDG Labs             | Flammable Liquid |
| Packing group        | II               |

#### IATA

|                      |                  |
|----------------------|------------------|
| UN Number            | 2344             |
| Proper shipping name | Bromopropanes    |
| Hazard Class         | 3                |
| IATA Labs            | Flammable Liquid |
| Packing group        | II               |

#### IMDG

|                      |                  |
|----------------------|------------------|
| UN Number            | 2344             |
| Proper shipping name | Bromopropanes    |
| Hazard Class         | 3                |
| IMDG Labs            | Flammable Liquid |
| Packing group        | II               |

## 15. Regulatory information

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|                              |  |
|------------------------------|--|
| Federal and State Regulation | Pennsylvania RTK: 1-Bromopropane Florida: 1-Bromopropane<br>Massachusetts RTK: 1-Bromopropane TSCA 8(b) inventory: 1-Bromopropane  |
| Other Regulation             | OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. |
| WHMIS (Canada)               | CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).  |
| DSCL (EEC)                   | R10- Flammable. R20- Harmful by inhalation. S9- Keep container in a well-ventilated place. S24- Avoid contact with skin.   |
| HMIS                         |  |
| Health Hazard                | : 2  |
| Fire Hazard                  | : 3  |
| Reactivity                   | : 0  |
| Personal Protection          | : H  |
| Fire :                       |  |
| Health Hazard                | : 2  |
| Fire Hazard                  | : 3  |
| Reactivity                   | : 0  |
| Specific Hazard              | :  |

## 16. Other information

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#### Other Information

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