SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product Name : Parabar 10312
Product Number : HR2-643/HR2-862
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the Safety Data Sheet

Company : Hampton Research
34 Journey
Aliso Viejo, CA 92656-3317
United States
Telephone : 949 425 1321
Fax : 949 425 1611
E-mail : tech@hrmail.com
e-mail Technical Support is available 24 hours a day.

For CHEMTREC Assistance : 800 424 9300
For CHEMTREC Assistance : 703 527 3887 (International)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

N/A

2.2 Label elements

N/A

2.3 Other hazards : none
SECTION 3 - Composition/Information On Ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Synonyms</th>
<th>: Paratone® N, Paratone® 8227, Infineum V8512 (Paratone® is a registered trademark of Chevron Corporation)</th>
</tr>
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<tbody>
<tr>
<td>Formula</td>
<td>: N/A</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>: N/A</td>
</tr>
<tr>
<td>CAS Number</td>
<td>: N/A</td>
</tr>
<tr>
<td>EC Number</td>
<td>: N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RTECS</th>
<th>Merck</th>
<th>Beilstein</th>
<th>SARA</th>
<th>MDL #</th>
<th>PubChem Substance ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

No components need to be disclosed according to the applicable regulations.

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Advice
Move out of dangerous area.
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

In case of skin contact
No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

In case of eye contact
No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

If swallowed
If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Note to Physicians
Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

4.2 Most important symptoms and effects, both acute and delayed
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed
No data available
SECTION 5: Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Unsuitable extinguishing media
None known

5.2 Special hazards arising from the substance or mixture
Carbon oxides

5.3 Advice for firefighters
This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

5.4 Further Information
Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Eliminate all sources of ignition in vicinity of spilled material.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.
Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling And Storage

7.1 Personal Precautions
Do not taste or swallow.
See Section 8 for additional information on hygiene measures. Normal measures for preventive fire protection.
(CONTINUED) - SECTION 7: Handling And Storage

7.2 Conditions for safe storage, including any incompatibilities
Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

7.3 Specific end uses
Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

7.4 Static Hazards
Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, ‘Flammable and Combustible Liquids’, National Fire Protection Association (NFPA 77, ‘Recommended Practice on Static Electricity’, and/or the American Petroleum Institute (API) Recommended Practice 2003, ‘Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents’.

SECTION 8 - Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Component</th>
<th>Agency</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates, hydrotreated light paraffinic</td>
<td>ACGIH</td>
<td>5 mg/m³</td>
<td>10 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Distillates, hydrotreated light paraffinic</td>
<td>OSHA Z-1</td>
<td>5 mg/m³</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8.1 Control parameters
Components with workplace control parameters

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Use in a well-ventilated area.

Personal protective equipment
Eye/face protection
No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin protection
No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Nitrile Rubber, Silver Shield, Viton.
Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| a) Appearance | Form: Liquid  
Color: Clear to amber, colorless to amber |
| b) Odor | no data available |
| c) Odor Threshold | Petroleum odor |
| d) pH | no data available |
| e) Melting point/freezing point | no data available |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapor pressure | <0.01 @ 37.8°C (100°F) |
| l) Vapor density (Air = 1): | >1 |
| m) Relative density | Kinematic viscosity at 100°C 641 cSt. |
| n) Water solubility | Soluble in hydrocarbons; insoluble in water |
| o) Partition coefficient: noctanol/water | no data available |
| p) Autoignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | Kinematic viscosity ratio at 100°C 2.05 |
| s) Explosive properties | no data available |
| t) Oxidizing properties | no data available |

9.2 Other safety information

no data available
SECTION 10: Stability And Reactivity

10.1 Reactivity
no data available

10.2 Chemical stability
Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4 Conditions to avoid
no data available

10.5 Incompatible materials
May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.6 Hazardous decomposition products
Other decomposition products - None known

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
Based on evaluation of data for similar materials or product components

Skin / irritation and corrosion
Based on evaluation of data for similar materials or product components

Serious eye damage/eye irritation
Based on evaluation of data for similar materials or product components

Respiratory or skin sensitization
Based on evaluation of data for similar materials or product components

Potential health effects
Inhalation
Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

Ingestion
Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death.

Skin
Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.
(CONTINUED) - SECTION 11: Toxicological Information

Eyes
Not expected to cause prolonged or significant eye irritation.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional information
This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12: Ecological Information

12.1 Toxicity
not expected to be harmful to aquatic organisms

12.2 Persistence and degradability
not expected to be readily biodegradable

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
no data available

SECTION 13: Disposal Considerations

13.1 Waste treatment methods
Product
Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.
### SECTION 14: Transportation Information

**14.1 UN number**
- ADR/RID: -
- IMDG: -
- IATA: -

**14.2 UN proper shipping name**
- **DOT Shipping Description:** PETROLEUM OIL, N.O.I.B.N.; NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR
- **IMO/IMDG Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER THE IMDG CODE
- **ICAO/IATA Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER ICAO

**14.3 Transport hazard class(es)**
- ADR/RID: -
- IMDG: -
- IATA: -

**14.4 Packaging group**
- ADR/RID: -
- IMDG: -
- IATA: -

**14.5 Environmental hazards**
- ADR/RID: No
- IMDG Marine pollutant: no
- IATA: No

**14.6 Special precautions for user**
- No data available

### SECTION 15: Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- No data available

**15.2 Chemical Safety Assessment**
- No data available

### SECTION 16: Other Information

**DISCLAIMER**
- For research use only. Not for drug, household, or other use.

**WARRANTY**
- The above information is believed to be correct but does no purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of this product. Hampton Research Corp., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.
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