Rust Proof Oil

1. Chemical & Company Identification

trade name: Rust Proof Oil
product code: 530804
supplier: Chevron Lubricants Vietnam Limited
           5th Floor - Horison Offices
           40 - Cat Linh
           Hanoi
           Vietnam
routine inquiries: +84-4-37332545
fax: +84-4-37332555

chemical description: Rustproof Compound

2. Composition & Ingredients

<table>
<thead>
<tr>
<th>components</th>
<th>cas no.</th>
<th>range in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoddard solvent</td>
<td>8052413</td>
<td>50 - 65</td>
</tr>
<tr>
<td>Solvent-dewaxed heavy paraffinic petroleum distillates</td>
<td>64742650</td>
<td>35 - 50</td>
</tr>
<tr>
<td>Barium carbonate</td>
<td>5137799</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Barium sulfonate</td>
<td>61790485</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

3. Hazards Identification

warning statements: FLAMMABLE.
                   HARMFUL IF INHALED OR ABSORBED THROUGH SKIN.
                   MAY CAUSE DIZZINESS AND DROWSINESS.
                   MAY CAUSE EYE AND SKIN IRRITATION.
                   ASPIRATION HAZARD. CAN CAUSE LUNG INJURY IF INGESTED
                   AND SWALLOWED.
                   KEEP OUT OF REACH OF CHILDREN.

eyes: Causes eye irritation characterized by tearing, pain, redness, blurred
      vision, and/or swelling.
oral: If more than several mouthfuls are swallowed, abdominal discomfort,
      nausea, and diarrhea may occur.
      Ingestion of this product and subsequent vomiting can result in
      aspiration into the lungs, causing chemical pneumonia and lung
      damage.
inhaled: Breathing the vapour or mist can cause respiratory irritation or
         discomfort.
Irritation of the nose, throat and lungs, headache, nausea, drowsiness, dizziness or unconsciousness may result from exposure to vapours or mists present in poorly ventilated or confined areas, or generated from spraying or heating the material.

**skin:**
May cause skin irritation.
Prolonged or frequently repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from the defatting action of this material.

**long term toxic effects:**
The base oil component(s) are not expected to be carcinogenic based on IARC criteria. This product has not been tested as a whole for chronic health effects.
Contains a solvent that may cause adverse systemic effects when ingested, inhaled, or absorbed through the skin.
See Section 11 for additional information.

### 4. First Aid Measures

**eyes:**
Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open.
If irritation persists, see a doctor.

**skin:**
Remove and launder contaminated clothing, including shoes. Wash skin thoroughly with soap and water. See a doctor if any signs or symptoms described in this MSDS occur.

**ingestion:**
Do not induce vomiting. Aspiration of the material can cause serious lung injury such as chemical pneumonia. Call a doctor immediately. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.

**inhalation:**
If there are signs or symptoms as described in this MSDS due to breathing this material, move the person to fresh air. If breathing has stopped, apply artificial respiration. Call a doctor.

**advice to doctor:**
This product may present an aspiration hazard. See related comments in this MSDS. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

### 5. Fire Fighting Measures

**ignition temp. (degrees c):**
Not Determined

**flammable limits (% by volume):**
Not Determined

**flash point (degrees c):**
40 (COC)

**fire extinguishing agents:**
According to the U.S. National Fire Protection Association Guide, use water fog, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for persons attempting to stop the leak.

**explosion hazards:**
Explosive air-vapour mixtures may form. Vapours may travel, be ignited at remote locations and flash back. Containers may explode in fire.
For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency.
6. Accidental Release Measures

in case of spill: Eliminate all ignition sources including internal combustion engines and power tools. Ventilate area. Keep people away. Stay upwind and warn of possible downwind explosion hazard. Avoid breathing vapours and eye or skin contact. Use respirator and protective clothing as discussed in this MSDS (See Section 8). Use supplied-air respirator for large releases in confined area. Contain spill if possible. Remove with inert absorbent and place in container for disposal at an approved facility. Prevent entry into sewers and waterways.

7. Handling & Storage

Keep away from heat, sparks, and flame. Keep containers tightly closed. Handle and store in well-ventilated area and in accordance with local regulations regarding flammable liquids. Empty containers retain residue (liquid and/or vapour) 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 ILLUMINATION: THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

8. Exposure Control/Personal Protection

eyes: Avoid eye contact. The wearing of chemical safety goggles or face shield is recommended.

skin: Avoid contact with skin or street clothing. Skin contact can be minimised by wearing protective clothing including overalls, gloves, and boots. Gloves and boots should be resistant to chemicals and petroleum distillates. Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.

inhalation: If operating conditions result in airborne mists or vapours, the use of an approved respirator is recommended. Wear approved respiratory protection such as an organic vapour cartridge respirator with particulate prefilter. Use approved supplied air respiratory protection for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.

ventilation: Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard(s). Local exhaust ventilation and/or enclosure of the process is preferred in these cases.

exposure limits: The ACGIH TLV for Stoddard solvent is 100 ppm as a daily 8-hour TWA.

The ACGIH TLV for mineral oil mists is 5 mg/m3 for a daily 8-hour exposure. A short term exposure limit (STEL) of 10 mg/m3 is recommended.

9. Physical & Chemical Properties
appearance & odor: Brown liquid
boiling point (deg. c): Not Determined
vapor pr. (mmhg @ 25 deg. c): Not Determined
density (kg/l at 15 deg. c): 0.8323
vapor density (air = 1): Not Determined
ph of undiluted product: Not Applicable
solubility (water): Negligible
percent volatile by volume: Not Determined
evaporation: Not Determined
viscosity (all product grades): 3.5 mm2/s @ 40 deg. C

10. Stability & Reactivity
products of combustion: Carbon monoxide, carbon dioxide, and aldehydes and ketones may be formed.
conditions to avoid: Heat, Strong Oxidizers

11. Toxicological Information
general: This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, hydrocracking and hydrotreating. These oils have not been listed in the U.S. National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic or probably carcinogenic to humans. Repeated and prolonged occupational exposure to solvents has been associated with permanent nervous system damage, commonly referred to as "solvent syndrome" or "painter's syndrome". Intentional misuse of this product may be harmful or fatal.

12. Ecological Information
environmental effects: This product or a component(s) is expected to be resistant to biodegradation.
This material or its component(s) may be toxic to aquatic organisms and should be kept out of sewage and drainage systems, and all bodies of water.

13. Disposal Considerations
waste disposal: Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.
remarks: Releases of this product should be prevented from contaminating soil, and from entering drainage, sewer systems, and all bodies of water.

14. Transport Information
transport of dangerous goods:
UN Number: 1268
Dangerous Goods Class: 3
Proper Shipping Name: Petroleum Distillates, N.O.S. or Petroleum Products, N.O.S.
Hazchem Code (Australia/NZ): 3Y
Additional Information: Transport in accordance with local regulations regarding flammable liquids.

15. Regulatory Information

respirator information: Respirator users in Australia and New Zealand should comply with AS/NZS 1715/1716. Where local approval authority is absent, respirator users can refer to U.S. NIOSH, European Standard EU-149, or joint Australia-New Zealand AS/NZS 1715/1716 for guidance.

16. Other Information

This product must not be used in drilling for potable water, for operating potable water systems, or inside potable water tanks.

To the best of our knowledge, the information provided in this MSDS document is correct. Access to this information is being provided via the Internet so that it can be made available to as many potential users as possible. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution. Customers are encouraged to review this information, follow precautions, and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user.

Approved HES Services Revision Date: Jul-01-1997