1. Identification

Product identifier: Liquid Wrench Penetrating Oil

Other means of identification
- SDS number: L104
- Part No.: L116, L104
- Tariff code: 3403.19.5000

Recommended use: Penetrant

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
- Company name: RSC Chemical Solutions
- Address: 600 Radiator Road, Indian Trail, NC 28079, United States
- Telephone: Customer Service: (704) 821-7643, Technical: (704) 684-1811
- Website: www.rscbrands.com
- E-mail: sds@rscbrands.com
- Emergency phone number: Emergency Telephone: (303) 623-5716, Emergency Contact: RMPDC (877-740-5015)

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards
- Sensitization, skin
- Category 1

Environmental hazards
- Hazardous to the aquatic environment, acute hazard
- Category 3
- Hazardous to the aquatic environment, long-term hazard
- Category 3

OSHA defined hazards
- Not classified.

Label elements

Signal word: Warning

Hazard statement: May cause an allergic skin reaction. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention
- Avoid breathing mist or vapor. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves.

Response
- If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Storage
- Store away from incompatible materials.

Disposal
- Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information
- 85.51% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.
- 85.51% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bht (butylated Hydroxytoluene)</td>
<td></td>
<td>128-37-0</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Fresh Fragrance</td>
<td>Trade Secret</td>
<td></td>
<td>&lt; 0.2</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>90 - 100</td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling
Provide adequate ventilation. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bht (butylated Hydroxytoluene) (CAS 128-37-0)</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Inhalable fraction and vapor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bht (butylated Hydroxytoluene) (CAS 128-37-0)</td>
<td>TWA</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

- Eye/face protection: Wear safety glasses with side shields (or goggles).
- Skin protection
  - Hand protection: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
  - Other: Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
- Respiratory protection: Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.
- Thermal hazards: Wear appropriate thermal protective clothing, when necessary.
- General hygiene considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid. Opaque</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow.</td>
</tr>
<tr>
<td>Odor</td>
<td>Naphthenic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>347 °F (175 °C) estimated</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200.0 °F (&gt; 93.3 °C) Tag Closed Cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>0.7 % estimated</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>8.5 % estimated</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Vapor pressure 8.21 hPa estimated
Vapor density Not available.
Relative density Not available.
Solubility(ies)
  Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature 410 °F (210 °C) estimated
Decomposition temperature Not available.
Viscosity Not available.
Other information
  Density 7.42 lbs/gal
  Explosive properties Not explosive.
  Flammability class Combustible IIIB estimated
  Heat of combustion (NFPA 30B) 3.33 kJ/g estimated
  Oxidizing properties Not oxidizing.
  Percent volatile 0.14 % estimated
  Specific gravity 0.89
  VOC (Weight %) 8.18 % estimated

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
  Inhalation Prolonged inhalation may be harmful.
  Skin contact May cause an allergic skin reaction.
  Eye contact Direct contact with eyes may cause temporary irritation.
  Ingestion Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics
  May cause an allergic skin reaction. Dermatitis. Rash.
Information on toxicological effects
Acute toxicity May cause an allergic skin reaction.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bht (butylated Hydroxytoluene) (CAS 128-37-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Guinea pig</td>
<td>10700 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>1040 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>890 mg/kg</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.
Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: May cause an allergic skin reaction.
- **Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

- **IARC Monographs. Overall Evaluation of Carcinogenicity**
  - Bht (butylated Hydroxytoluene) (CAS 128-37-0): Not classifiable as to carcinogenicity to humans.
  - Not listed.

Reproductive toxicity

- This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

- Not classified.

Specific target organ toxicity - repeated exposure

- Not classified.

Aspiration hazard

- Not an aspiration hazard.

Chronic effects

- Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bht (butylated Hydroxytoluene) (CAS 128-37-0)</td>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia pulex) 1.44 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

No data available.

**Mobility in soil**

No data available.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations**

Dispose in accordance with all applicable regulations.

**Hazardous waste code**

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information**

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
  Not regulated.
- CERCLA Hazardous Substance List (40 CFR 302.4)
  Not listed.
- SARA 304 Emergency release notification
  Not regulated.
  Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

- Hazard categories
  Immediate Hazard - Yes
  Delayed Hazard - No
  Fire Hazard - No
  Pressure Hazard - No
  Reactivity Hazard - No
- SARA 302 Extremely hazardous substance
  Not listed.
- SARA 311/312 Hazardous chemical
  No
- SARA 313 (TRI reporting)
  Not regulated.

Other federal regulations

- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  Not regulated.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  Not regulated.
- Safe Drinking Water Act (SDWA)
  Not regulated.

US state regulations

- US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
  Not listed.
- US. Massachusetts RTK - Substance List
  Bht (butylated Hydroxytoluene) (CAS 128-37-0)
- US. New Jersey Worker and Community Right-to-Know Act
  Bht (butylated Hydroxytoluene) (CAS 128-37-0)
- US. Pennsylvania Worker and Community Right-to-Know Law
  Bht (butylated Hydroxytoluene) (CAS 128-37-0)
- US. Rhode Island RTK
  Not regulated.
- US. California Proposition 65
  California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
</tbody>
</table>

Material name: Liquid Wrench Penetrating Oil
L116, L104  Version #: 02  Revision date: 03-09-2016  Issue date: 04-27-2015
Country(s) or region | Inventory name | On inventory (yes/no)  
--- | --- | ---  
Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No  
Europe | European List of Notified Chemical Substances (ELINCS) | No  
Japan | Inventory of Existing and New Chemical Substances (ENCS) | No  
Korea | Existing Chemicals List (ECL) | No  
New Zealand | New Zealand Inventory | No  
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No  
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes  

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

- **Issue date**: 04-27-2015
- **Revision date**: 03-09-2016
- **Version #**: 02
- **HMIS® ratings**: 
  - Health: 2
  - Flammability: 0
  - Physical hazard: 0
- **NFPA ratings**: 
  - Health: 2
  - Flammability: 0
  - Instability: 0

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision Information**
- Fire-fighting measures: Fire fighting equipment/instructions
- Fire-fighting measures: Specific hazards arising from the chemical
- Fire-fighting measures: General fire hazards
- Exposure controls/personal protection: Respiratory protection
- Physical and chemical properties: Odor
- Toxicological information: Carcinogenicity
- Regulatory Information: TSCA 12b Exported Products
- Regulatory information: US federal regulations
- HazReg Data: International Inventories