V-Solv™ ICP Solvent MSDS  
REVISION DATE: 11/10/09

SECTION 1 – IDENTIFICATION OF SUBSTANCE

Product Name: V-Solv™ ICP Solvent  
Product Number: V-SOLV-XXX  
Company Identification: VHG Labs, Inc  
276 Abby Road  
Manchester, NH 03103  
Tel: (603) 622-7660  
Fax: (603) 622-5180  
Emergency Contact: 800-424-9300 Chemtrec (24 hrs)

SECTION 2 – COMPOSITION/DATA ON COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>OSHA/PEL</th>
<th>ACGIH/TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrotreated Middle Distillate</td>
<td>64742-46-7</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview: Combustible, irritating to skin, eyes, and mucous membranes, hazardous to ingest or inhale.

Target Organs: Eyes, skin, mucous membranes, respiratory system, digestive tract, renal system, central nervous system.

Eye/Skin Contact: Repeated or prolonged exposure is slightly hazardous. Extreme over-exposure can be fatal.

Inhalation: Harmful to respiratory system if inhaled. May cause pneumonia.

Ingestion: Potentially harmful if swallowed. Symptoms include dizziness, loss of consciousness, and internal hemorrhaging.

SECTION 4 – FIRST AID MEASURES

Ingestion: Immediately call a physician or poison control center. Do not induce vomiting.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep patient warm. Immediately call a physician if feeling unwell.

Skin Contact: Immediately flush skin with soap and plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If irritation occurs, seek medical attention.

Eye Contact: Immediately flush with plenty of water for at least 15 minutes. Seek medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: 260°F  
Autoignition Temperature: N/A  
Flammable Limits: Upper - N/A; Lower - N/A  
Fire Extinguishing Media: Carbon dioxide, extinguishing powder or foam. Do not use water.

Special Fire-Fighting Procedures: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special Fire & Explosion Hazards: Carbon monoxide can be released when combustion is incomplete. In certain conditions, other toxic gases may be produced.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective equipment. Evacuate those without protective equipment. Ensure adequate ventilation.

Environmental Precautions: Prevent product from entering drains or groundwater if possible. Dispose of in accordance to local regulations.

Clean Up Methods: Use and absorbent material on the spill. Place in appropriate chemical waste container. Ensure adequate ventilation and keep away from ignition sources. Follow local, state, and federal regulations for disposal.
SECTION 7 – HANDLING AND STORAGE

Handling: Keep container tightly sealed. Use in areas with adequate exhaust ventilation. Wear appropriate protective equipment. Keep away from ignition sources and ensure protection from static discharges.

Storage: Store in cool, dry, well ventilated location in a tightly sealed container. Keep out of direct sunlight and keep away from heat and oxidizing agents.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Design of Technical Systems: Use under fume hood with face velocity of at least 100 feet per minute. Ensure availability of eyewash stations and safety showers.

Respiratory Protection: Ensure adequate ventilation. Use suitable respirator when high concentrations are present.

Hygienic Protection: Keep away from food and beverages. Remove all soiled or contaminated clothing immediately.

Personal Protection: Wear impervious gloves, chemical resistant apron or lab coat, and safety goggles.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>≈ 430-530°F</td>
</tr>
<tr>
<td>Melting Point</td>
<td>≈ -79°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.82</td>
</tr>
<tr>
<td>Solubility (H₂O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>pH</td>
<td>N/E</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>clear</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>0.4</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>6.2</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>0.03 (BUT ACET=1)</td>
</tr>
<tr>
<td>% Volatiles by Volume</td>
<td>≈ 99 (21°C)</td>
</tr>
<tr>
<td>Odor Threshold (ppm)</td>
<td>N/A</td>
</tr>
<tr>
<td>Coefficient Water/Oil Distribution</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable under normal conditions. Hazardous polymerization will not occur.

Conditions to Avoid: Excessive Heat and Flame

Incompatables: Oxidizing agents

Decomposition Products: Carbon monoxide and carbon dioxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity Data: Irritates the skin, mucous membrane, and eyes. Ingestion can affect central nervous system, blood, and renal system, which can be fatal in large doses.

Component Data:  

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>RTECS#</th>
<th>Weight %</th>
<th>LD/LC50</th>
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</thead>
<tbody>
<tr>
<td>Hydrotreated Middle Distillate</td>
<td>64742-46-7</td>
<td>N/A</td>
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SECTION 12 – ECOLOGICAL INFORMATION

Product Information: Do not allow product to contaminate ground water, water bodies or sewage system.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: Follow federal, state and local regulations for waste disposal.

SECTION 14 – TRANSPORT INFORMATION

This product is not hazardous to ship.
SECTION 15 – REGULATORY INFORMATION

Hazard Symbols: Xn Harmful
SARA: Subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372. Components of this solution are listed on the TSCA Inventory.
WHMIS Classification: Class B, Flammable
Risk Phrases: R10, R20/22, R65, - Flammable, harmful by inhalation or if swallowed, may cause lung damage if swallowed.
Safety Phrases: S9, S16, S23, S26, S36/37/39- Keep container in a well ventilated place, keep away from ignition sources, avoid inhalation, in case of contact with eyes, rinse immediately with plenty of water and seek medical attention, wear suitable protective clothing, gloves, and eye/face protection.

SECTION 16 – OTHER INFORMATION

N/A = Not Applicable or Not Available
N/E = Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, we cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. We warrant that the chemical meets the specifications set forth on the label. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE. The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION.

Approved by Quality Assurance Department.