### Section 1: Product and Company Identification

- **Product Name:** Additin RC 9505 440D
- **Article Number:** 2284048
- **Chemical Family:** Oil Additives
- **Chemical Name:** Solution of Zinc Dialkylthiophosphate and corrosion inhibitor in Mineral Oil

### Section 2: Composition/Information on Ingredients

#### HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name/ CAS Number</th>
<th>Exposure Limits</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Alkyl Dithiophosphate 68649-42-3</td>
<td>OSHA (PEL): Not Established</td>
<td>30% 60%</td>
</tr>
<tr>
<td></td>
<td>ACGIH (TLV): Not Established</td>
<td></td>
</tr>
<tr>
<td>Sulfurized Rape Oil         Specific chemical identity is withheld as a trade secret</td>
<td>OSHA (PEL): 5.00 mg/m3 TWA Respirable Fraction 15.00 mg/m3 TWA Fume ACGIH (TLV): 10.00 mg/m3 TWA</td>
<td>10% 30%</td>
</tr>
</tbody>
</table>

Exposure limit for: Vegetable oil mists
Hydrotreated Light Paraffinic Distillates
Specific chemical identity is withheld as a trade secret

OSHA (PEL):
5.00 mg/m³ TWA
ACGIH (TLV):
10.00 mg/m³ STEL
5.00 mg/m³ TWA

Exposure limit for: Oil mist, mineral

OSHA (PEL):
5.00 mg/m³ TWA
ACGIH (TLV):
10.00 mg/m³ STEL
5.00 mg/m³ TWA

Exposure limit for: Oil mist, mineral

Section 3: Hazards Identification

EMERGENCY OVERVIEW

WARNING! Non-regulated. Color: Brown Form: Liquid Odor: Characteristic
May cause skin irritation. Causes eye irritation. Do not use water to extinguish fire.
Toxic gases/fumes are given off during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS

Route(s) of Entry: Inhalation, Skin Contact, Eye Contact

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation Hazards
Acute Inhalation Hazards: Under normal working conditions, using good industrial hygiene practices, this material is not expected to pose an inhalation hazard.

Chronic Inhalation Hazards: None reported for this product as a whole.

Skin Hazards
Acute Skin Hazards: Skin contact with this product may cause skin irritation with discomfort or rash.

Chronic Skin Hazards: None reported for this product as a whole.

Eye Hazards
Acute Eye Hazards: Contact with the eyes, liquid and vapors, causes severe irritation and pain.

Chronic Eye Hazards: None reported for the product as a whole, expected to be similar to those listed for acute eye exposure.

General Effects of Exposure
Chronic Effects of Exposure: None reported for this product as a whole. Effects are expected to be similar to those listed for acute human health effects. Repeated and prolonged contact with mineral oils may cause fibrotic nodules, lipid
pneumonia, lipid granuloma, and defatting of the skin which may result in dermatitis.

**Carcinogenic Components:**

- **NTP:** None
- **IARC:** None
- **OSHA:** None

**Medical Conditions Aggravated by Exposure:**

May aggravate existing eye or skin conditions.

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### Section 4: First Aid Measures

**First Aid for Eye:**

In case of contact, flush eyes with large quantities of water for at least 15 minutes. The eyelids should be held apart during irrigation to ensure thorough flushing of all eye tissue. Call a physician immediately.

**First Aid for Skin:**

Immediately remove contaminated clothing and shoes. In case of skin contact, wash affected areas with soap and water. Wash clothing and clean shoes before reuse. Call a physician immediately.

**First Aid for Inhalation:**

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If inhaled, remove to fresh air.

**First Aid for Ingestion:**

Call a physician.

**Note to Physician:**

Treat symptomatically.

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### Section 5: Fire Fighting Measures

**Flash Point:** Approximately 356 °F (180 °C) ISO 2592

**Flammable Limits:**

- **Upper Explosion Limit (UEL %):** Not Established
- **Lower Explosion Limit (LEL %):** Not Established

**Auto-ignition Temperature:** Not Established

**Extinguishing Media:**

- **Suitable:** Carbon Dioxide, Dry Chemical, Foam
- **Unsuitable:** Water

**Special Fire Fighting Procedures:**

A solid stream of water directed into the burning material could spread the fire. Evacuate non-emergency personnel to a safe area. Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. Use cold water spray to cool fire exposed containers. During a fire, irritating
and toxic gases may be generated by thermal decomposition or combustion.

Unusual Fire/Explosion Hazards:
None known.

Section 6: Accidental Release Measures

Spill or Leak Procedures:
Cover the spill with absorbent material such as sand, sweeping compound or diatomaceous earth. Scoop up solid absorbent for waste disposal. Ventilate area to remove vapors. Keep unnecessary personnel out of spill area. Keep from entering water or ground water. Emergency clean-up personnel should wear appropriate protection when entering the spill area for clean-up.

Section 7: Handling and Storage

Storage Temperature:
Store at ambient conditions

Shelf Life:
Approximately 12 Months

Special Sensitivity:

Handling/Storage Precautions:
Store in a dry place away from excessive heat. Keep container tightly closed when not in use. Avoid contact with skin or clothing. Avoid breathing dusts, vapors or mists. Handle in accordance with good industrial hygiene and safety practices. Storage area should be equipped with sprinkler system. Do not get in eyes. Do not get on skin or clothing.

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment

Eye Protection Requirements:
Chemical safety goggles, full-face shield.

Skin Protection Requirements:
Permeation resistant gloves (neoprene, nitrile, or PVC) and impervious clothing (long sleeve shirts) are recommended.

Ventilation Requirements:
Use local exhaust ventilation if dusting or misting is a problem, to maintain air levels below the recommended exposure limit.

Respirator Requirements:
The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA). Air purifying respirator equipped with a full-face organic vapor and dust/mist cartridge if vapors are near or exceeding the exposure limits listed in Section 2. Observe OSHA regulations for respirator use (29 CFR 1910.134.)
Additional Protective Measures:

Emergency showers and eye wash stations should be available. Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees on the safe use and handling of this product.

### Section 9: Physical and Chemical Properties

- **Physical Form:** Liquid
- **Color:** Brown
- **Odor:** Characteristic
- **pH:** Not Established
- **Boiling Point:** Not Established
- **Melting/Freezing Point:** Not Applicable
- **Viscosity:** Approximately 1 cm²/s (kinematic value) @ 104 °F (40 °C) DIN 51562
- **Solubility in Water:** Essentially Insoluble
- **Solubility (non Aqueous):** Soluble in mineral oils and synthetic base oils
- **Specific Gravity:** Not Established
- **Evaporation Rate:** Not Established
- **Vapor Pressure:** Not Established
- **Vapor Density:** Not Established
- **VOC by Weight:** Not Established
- **HOC by Weight:** None

### Section 10: Stability and Reactivity

- **Stability:** Stable
- **Hazardous Polymerization:** Will not occur
- **Substances to Avoid:** Oxidizing materials
- **Conditions to Avoid:** High Heat.
- **Decomposition Temperature:** Approximately 338 °F (170 °C)
- **Decomposition Products:** By fire and/or thermal decomposition: alkylmercaptans, dialkylsulfides, hydrogen sulfide, oxides of sulfur, oxides of carbon, and other undetermined aliphatic fragments.

### Section 11: Toxicological Information

**Toxicity Data for Additin RC 9505 440D**

- **Acute oral toxicity:** LD₅₀ = > 2,000 mg/kg (Rat)
- **Eye Irritation:** Moderately irritating (Rabbit)
- **Skin Irritation:** Slightly irritating (Rabbit)
Toxicity Data for Zinc Alkyl Dithiophosphate
Toxicity Note: No data available for this component.

Toxicity Data for Sulfurized Rape Oil
Toxicity Note: No data available for this component.

Toxicity Data for Hydrotreated Light Paraffinic Distillates
Toxicity Note: No data available for this component.

Toxicity Data for Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic
Toxicity Note: No data available for this component.

Section 12: Ecological Information

Ecological Data for Additin RC 9505 440D
Ecological Note: No data available for this product.

Ecological Data for Zinc Alkyl Dithiophosphate
Ecological Note: No data available for this component.

Ecological Data for Sulfurized Rape Oil
Ecological Note: No data available for this component.

Ecological Data for Hydrotreated Light Paraffinic Distillates
Ecological Note: No data available for this component.

Ecological Data for Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic
Ecological Note: No data available for this component.

Section 13: Disposal Considerations

Waste Disposal Method: Disposal must be in compliance with federal, state and local environmental control regulations. If incinerated, toxic and corrosive combustion gases must be properly handled.

Empty Container Precautions: Empty container retains product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity, or other sources of ignition. Recondition or dispose of empty container in accordance with government regulations.

Section 14: Transportation Information

Technical shipping name: Lubricating Oil Additives

Freight Class
Bulk: Chemicals, N.O.I. (NMFC 60000)
**Package:** Chemicals, N.O.I. (NMFC 60000)

**Product Label:** Product Label Established

**Domestic Surface Transportation (DOT)**

Hazard Class or Division: Non-Regulated

**Marine Transportation (IMO / IMDG)**

Hazard Class Division Non-Regulated
Number: 

**Air Transportation (ICAO / IATA)**

Hazard Class Division Non-Regulated
Number: 

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**Section 15: Regulatory Information**

**United States Federal Regulations**

**OSHA Hazcom Standard** Hazardous

**TSCA Inventory List:** On TSCA Inventory

**CERCLA Hazardous Substance:**

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Alkyl Dithiophosphate (Regulated as: Zinc and Compounds (No RQ established for this general class.))</td>
<td></td>
</tr>
</tbody>
</table>

**SARA Title III**

**SARA Section 302 Extremely Hazardous Substances:**

<table>
<thead>
<tr>
<th>Component(s)/ CAS Number</th>
<th>Concentration Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SARA Section 311/312 Hazard Categories:** Immediate Health Hazard

**SARA Section 313 Toxic Chemicals:**

<table>
<thead>
<tr>
<th>Component(s)/ CAS Number</th>
<th>Reporting Threshold Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Alkyl Dithiophosphate (Regulated as: Zinc Compounds) 68649-42-3</td>
<td>1.0 %</td>
<td>30% 60%</td>
</tr>
</tbody>
</table>

**RCRA Status:** Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product, should be classified as a hazardous waste. (40 CFR 261.20-24)

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.
State Right-to-Know Information

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>CAS Number</th>
<th>State Code</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Alkyl Dithiophosphate</td>
<td>68649-42-3</td>
<td>PA-E, NJ-H, NJ-E</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>Sulfurized Rape Oil</td>
<td>NJTSRN:000001119</td>
<td>PA-H, NJ-N, MA-H</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Hydrotrated Light Paraffinic Distillates</td>
<td>NJTSRN:00000955</td>
<td>PA-H, NJ-H, MA-H</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Petroleum Sulfonate</td>
<td>NJTSRN:00000839</td>
<td>PA-N, NJ-N</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Distillates, Petroleum, Solvent-Dewaxed Heavy Paraffinic</td>
<td>64742-65-0</td>
<td>PA-H, NJ-H, MA-H</td>
<td>7%</td>
<td>13%</td>
</tr>
</tbody>
</table>

The following component(s) are listed under Massachusetts Extra-ordinary Hazards:

Hydrotrated Light Paraffinic Distillates | MA-X | 7% | 13%
NJTSRN:00000955

State Code Translation Table

PA-N = Pennsylvania Non-hazardous
PA-H = Pennsylvania Hazardous Substance List
PA-E = Pennsylvania Environmental Hazardous Substance List
NJ-N = New Jersey Other - includes predominant ingredients
NJ-H = New Jersey Hazardous Substance List
NJ-E = New Jersey Environmental Hazardous Substance List
MA-H = Massachusetts Hazardous Substance List
MA-X = Massachusetts Extra-ordinary Hazardous Substance List

Section 16: Other Information

HMIS Rating

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
*Chronic Health Hazard

RHEIN CHEMIE CORPORATION’s method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by RHEIN CHEMIE CORPORATION as a customer service.

Contact: Greg Breault
Phone: (609) 771-3555
MSDS Number: 000000000318
Version Date: 05/06/2003
MSDS Version: 1.9

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