MATERIAL SAFETY DATA SHEET

ADDITIN RC 5250  440D/1760S

RHEIN CHEMIE CORPORATION
145 Parker Court
Chardon, OH  44024

TRANSPORTATION EMERGENCY
CALL CHEMTREC......... : (800) 424-9300
INTERNATIONAL ........... : (703) 527-3887

NON-TRANSPORTATION
RCC EMERGENCY PHONE : (440) 285-3547
RCC INFORMATION PHONE: (800) 289-2436

Section 1: Product and Company Identification

Product Name: ADDITIN RC 5250  440D/1760S
Article Number: 3003616
Product Code: 003003616
Chemical Family: Oleic Acid, Sulfurized
Product Use: The product is not affected by the European directive 2002/95/EC (RoHS)

Section 2: Composition/Information on Ingredients

HAZARDOUS INGREDIENTS

Ingredient Name/ CAS Number  Concentration
Exposure Limits  Min.  Max.
This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

Section 3: Hazards Identification

EMERGENCY OVERVIEW

CAUTION! Non-regulated.  **Color:** Light Brown  **Form:** Liquid  **Odor:** Characteristic
Product poses little or no hazard if spilled and no unusual hazard if involved in a fire. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Use water as fog or mist; solid streams may spread fire. Irritating 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

General Effects of Exposure
Acute Effects of Exposure: Under normal working conditions, at ambient or room temperatures, using good industrial hygiene practices, this product should not pose an inhalation, skin or eye exposure problem. The American Conference of Governmental Industrial Hygienists (ACGIH) recommends that analogous products are considered "nuisance" particulates that seem to have little adverse effect on the lungs and do not produce significant organic disease or toxic effects when exposures are kept under reasonable control for aerosolized (misled) materials (use exposure limits listed at the end of Section 3 - Hazards Identification).

Carcinogenic Components:
NTP: None
IARC: None
OSHA: None

Medical Conditions Aggravated by Exposure: None have been reported for this product.

Human Health Effects Postnote: This product at ambient temperatures, under normal working conditions, is not considered hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, if this material is used in a manner which generates an aerosol or mist, such as thermal processing, the exposure limits listed for Vegetable Oil Mist, General - OSHA: 5 mg/m3 TWA-Mist (Respirable); 15 mg/m3 TWA-Mist (Total) ACGIH: 10 mg/m3 TWA-Mist (Respirable) - must be followed in order to insure adequate worker safety.

Section 4: First Aid Measures

First Aid for Eye: Call a physician immediately. 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.

First Aid for Skin: Get medical attention if irritation develops or persists. In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Wash clothing and clean shoes before reuse.

First Aid for Inhalation: If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately. If inhaled, remove to fresh air.

First Aid for Ingestion: Give victim one or two glasses of water or milk. If material is ingested, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Get medical attention.

Note to Physician: Treat symptomatically.

Section 5: Fire Fighting Measures

Flash Point: Approximately 350 °F (180 °C)

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

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. Hydrogen sulfide (H2S) formation is possible after prolonged heating.

Unusual Fire/Explosion Hazards: None known.

Section 6: Accidental Release Measures

Spill or Leak Procedures: Do not allow spilled or released material to enter ground water, waste water or soil. Extinguish all ignition sources. Emergency clean-up personnel should wear appropriate protection when entering the spill area for clean-up. Notify local health authorities and other appropriate agencies if such contamination should occur. Cover the spill with absorbent material such as sand, sweeping compound or diatomaceous earth. Scoop up solid absorbent for waste disposal. Spill area can be washed with water. Ventilate area to remove vapors.

Other Accidental Release Notes: Rhein Chemie requires that CHEMTREC be immediately notified (800-424-9300) when this product is unintentionally released from its container during its course of distribution, regardless of the amount released. Distribution includes transportation, storage incidental to transportation, loading and unloading. Such notification must be immediate and made by the person having knowledge of the release.
Section 7: Handling and Storage

Storage Temperature: Not Established - Ambient Recommended

Shelf Life: Not Established

Special Sensitivity: Heat and sources of ignition.

Handling/Storage Precautions: Keep away from heat, sparks and flames. 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. Storage area should be equipped with sprinkler system. Handle in accordance with good industrial hygiene and safety practices.

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment
Eye Protection Requirements: Contact lenses should not be worn. Chemical safety goggles, full-face shield, Safety glasses with side shields or goggles are recommended.

Skin Protection Requirements: Wear appropriate chemical resistant gloves and clothing. Avoid repeated or prolonged contact.

Protective Clothing Requirements: Appropriate protective clothing (long sleeve shirts).

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

Respirator Requirements: A NIOSH/MSHA dust respirator is recommended if the airborne dust concentration are near or exceed the exposure limits listed in Section 2. 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.

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: Light Brown
Odor: Characteristic
Odor Threshold: Not Established
pH: Not Established
Boiling Point: Not Established
Melting/Freezing Point: Not Established
<table>
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<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Viscosity</td>
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</tr>
<tr>
<td>Solubility in Water</td>
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</tr>
<tr>
<td>Solubility (non Aqueous)</td>
<td>Soluble in mineral oils and synthetic base oils</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Approximately 1.01 @ 68 °F (20 °C)</td>
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<tr>
<td>Bulk Density</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Vapor Pressure</td>
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</tr>
<tr>
<td>Vapor Density</td>
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<td>VOC by Weight</td>
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<tr>
<td>HOC by Weight</td>
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**Section 10: Stability and Reactivity**

**Stability:**
Stable, Material is stable room temperature under normal storage and handling conditions.

**Hazardous Polymerization:**
Will not occur

**Substances to Avoid:**
Oxidizing agents

**Conditions to Avoid:**
Avoid heat, flames, sparks and other sources of ignition.

**Decomposition Temperature:**
Approximately 356 °F (180 °C)

**Decomposition Products:**
Under thermal decomposition and/ or fire - partially oxidized hydrocarbons, carbon monoxide, carbon dioxide, hydrogen sulfide, and sulfur dioxide may be possible.

**Section 11: Toxicological Information**

**Toxicity Data for ADDITIN RC 5250 440D/1760S**

**Acute oral toxicity:**
LD50 = > 2,000 mg/kg (Rat)  Source: Tests performed on a similar product

**Acute dermal toxicity:**
Not Established

**Acute inhalation toxicity:**
Not Established

**Eye Irritation:**
Non-irritating (Rabbit) OECD Guideline No. 404 (Acute Dermal Irritation/Corrosion)  Source: Tests performed on a similar product

**Skin Irritation:**
Non-irritating (Rabbit) OECD Guideline No. 404 (Acute Dermal Irritation/Corrosion)  Source: Tests performed on a similar product

**Sensitization:**
No sensitization. (Guinea pig) OECD Guideline No. 406 (Skin Sensitization)  Source: Tests performed on a similar product

**Section 12: Ecological Information**

**Ecological Data for ADDITIN RC 5250 440D/1760S**

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Material Name: ADDITIN RC 5250 440D/1760S  Article Number: 3003616

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Ecological Note: Water Pollution Class WGK 1 - slightly hazardous to water (German Water Resources Act)

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: Sulfurized Vegetable Fatty Acid Esters, Fatty Acids and Hydrocarbons

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:

Section 15: Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard Rating: Non-Hazardous

TSCA Inventory List: On TSCA Inventory

CERCLA Hazardous Substance:
Component(s): None

Reportable Quantity:

SARA Title III
SARA Section 302 Extremely Hazardous Substances:

Component(s)/CAS Number: None

SARA Section 311/312 Hazard Categories: Non-hazardous under Section 311/312

SARA Section 313 Toxic Chemicals:

Component(s)/CAS Number:
None

Reporting Threshold Concentration:

RCRA Status: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, 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

Component(s)/CAS Number: State Code Concentration

Sulfurized Oleic Acid PA-N, NJ-N
NJTSRN:000001145 100%

State Code Translation Table
PA-N = Pennsylvania Non-hazardous
NJ-N = New Jersey Other - includes predominant ingredients

Foreign Chemical Inventory List(s)

DSL (Canada): Listed

Section 16: Other Information

HMIS Rating

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<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
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0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
*=Chronic Health Hazard

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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:     HES Dept.
Phone:       (440) 285-3547
MSDS Number: 000000002402
Version Date: 06/12/2009
MSDS Version: 1.4

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