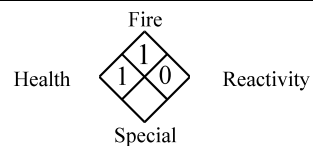




MATERIAL SAFETY DATA SHEET

HAZARD RATING
 4 - EXTREME
 3 - HIGH
 2 - MODERATE
 1 - SLIGHT
 0 - INSIGNIFICANT



SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDENTITY: PETROLEUM RESIN

MANUFACTURER:

TRADE NAMES: ZECO AA-1026, AA-3453,
AA-3454, AA-5506

ZIEGLER CHEMICAL & MINERAL CORP.
 600 Prospect Avenue
 Piscataway, NJ 08854 USA

DATE: March 12, 2004
 Revision: 6

Telephone #: 1-732-752-4111

24 HR CHEMTREC EMERGENCY NUMBER: 1-800-424-9300
 (OUTSIDE THE U.S. AND CANADA: 1-703-527-3887)

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

Components	CAS #	Weight %	OSHA PEL	ACGIH TLV	Other Limits Recommended
Petroleum Resin	64742-16-1	100	None	None	None

N.E. = Not Established

PEL = Permissible Exposure Limits

TLV = Threshold Limit Value

OSHA = Occupational Safety and Health Administration

ACGIH = American Conference of Governmental Industrial Hygienists

NIOSH = National Institute for Occupational Safety and Health

SECTION 3 - HAZARDS IDENTIFICATION

Potential Health Effects:

Thermal burns may result from contact with hot material

SECTION 4 - FIRST AID MEASURES

- Eye Contact:** If the hot material should splash into the eyes, flush eyes immediately with plenty of water while holding the eyelids open. Seek medical attention.
- Skin Contact:** If the hot material gets on skin, quickly cool in water. Get medical attention for extensive burns. DO NOT try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.
- 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 and get medical attention.
- Ingestion:** Since this material is not expected to be an ingestion problem, no first aid procedures are required.

SECTION 5 - FIRE FIGHTING MEASURES

- Flash Point (C.O.C.):** 550°F (287°C) Minimum
- Dust Explosivity Limits:** Not Applicable
- Extinguishing Media:** Carbon dioxide (CO₂), dry chemical, foam or water spray (fog).
- Fire Fighting Procedures:** Minimize breathing vapors, gases or fumes of decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces.
- Unusual Fire Hazards:** When heated above flash point, material will release flammable vapors which can burn or be explosive in confined spaces if ignited. Do not mix with strong oxidants such as liquid chlorine or concentrated oxygen.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Eliminate sources of ignition. Recover free product. Add sand, earth, or other suitable absorbent to spill area. Let cool and solidify. Scrape up into suitable containers.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

SECTION 7 - HANDLING AND STORAGE

Health Studies have shown that many petroleum hydrocarbons pose potential human health risks which vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. Adhere to good hygienic practices. Avoid open flames.

Store in a cool, dry place, out of direct sunlight and away from heat, sparks and open flame.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Use NIOSH/MSHA certified respirator with dual organic vapor/mist and particulates cartridge air if vapors concentration exceeds permissible exposure limit.

Ventilation: Local Exhaust: In enclosed areas to maintain allowable PEL or TLV. Special: None
Mechanical: In enclosed areas to maintain allowable PEL or TLV. Other: None

Eye Protection: Safety glasses or face shield for hot material.

Protective Gloves: Insulated for hot material.

Other Protective Clothing Equipment: Long sleeves and impervious clothing to protect against splashed hot material.

Work/Hygienic Practices: See Section 7.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Black solid, cold. Petroleum odor

Vapor Pressure (mm Hg.) @ 20°C: N.E.

Boiling Point °F IBP Approx.: 1000 min.

Evaporation Rate (Butyl Acetate =1) @ 77°F: < 0.01

Melting Point °F (Ring & Ball): 80 – 300

Vapor Density (Air = 1): N.E.

Solubility in water: Negligible

Flash Point (C.O.C.): 550°F Min.

Specific Gravity (H₂O =1): .9 - 1.0

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Do not overheat product. Auto-ignition may occur if heated beyond 600°F.

Incompatibility (Materials to Avoid): May react with strong oxidizing materials.

Hazardous Decomposition or Byproducts: Combustion: carbon dioxide (CO₂), carbon monoxide (CO), sulfur oxides (SO_x), hydrogen sulfide (H₂S), smoke, fumes.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

The cool solid material is not expected to cause eye and skin irritation, nor is it expected to have acute systemic toxicity by ingestion.

See additional health data for hot material health effect.

Carcinogenicity: NTP? No IARC Monograph? See Section 16 OSHA Regulated? No

SECTION 12 - ECOLOGICAL INFORMATION

EPA Hazard Classification Code:

Acute Hazard: ____ Chronic Hazard: ____ Fire Hazard: ____ Pressure Hazard: ____

Reactive Hazard: ____ Not Applicable: X

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

The Description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations, for additional description requirements.

Solid: Non Hazardous, Non Regulated

Hot Liquid:

DOT Shipping Name: Petroleum resin

DOT Label Information: Elevated temperature material, liquid, n.o.s. (petroleum resin)

DOT Hazard Class: 9 (Miscellaneous)

DOT ID Number: NA 3257

DOT Packing Group: III

SECTION 15 - REGULATORY INFORMATION

SARA TITLE III - EPA Regulation 40 CFR 302 (CERCLA Section 102); CFR 355 (SARA Section 301-304); CFR 372 (SARA Section 311-313) - NOT APPLICABLE.

EPA HAZARD CLASSIFICATION CODE: Acute Hazard/Chronic Hazard/Fire Hazard/Pressure Hazard/Reactive Hazard - NOT APPLICABLE.

TOSCA, CANADIAN DSL: All components of this product are on the TOSCA and DSL inventories.

SECTION 16 - OTHER INFORMATION

Revision Statement:

This Material Safety Data Sheet has been revised to update the Company's address and telephone number.

Supersedes: March 23, 2003

This 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. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for his own particular use.