

SAFETY DATA SHEET

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# **SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

### **IDENTITY: MINERAL SPIRITS CUTBACK**

**TRADE NAMES:** ZECO AA-4001, AA-4002, AA-4003, AA-4005, AA-4006, AA-4035, AA-4041, AA-4047, AA-4061, AA-4102, AA-4103, AA-4106, AA-4108, AA-4112, AA-4116, AA-4118, AA-4121, AA-4124, AA-4128, AA-4130, AA-4162, AA-4163, AA-4164, AA-4165, AA-4166, AA-4167, AA-4171, AA-4182, Sealkote HF, RC-30, RC-70, RC-250

#### MANUFACTURER:

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

Telephone #: 1-732-752-4111

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

DATE: February 8, 2016 Revision 21

**USES AND RESTRICTIONS:** Industrial Coating.

# **SECTION 2 - HAZARDS IDENTIFICATION**

### **Emergency Overview:**



**DANGER!** Flammable liquid and vapor. Category 3 (Flash point  $23^{\circ}C \le and \le 60^{\circ}C$ ) (73°F  $\le$  and  $\le 140^{\circ}F$ ). Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.



**DANGER!** Hot material can cause burns. If burned by hot product, cool immediately with water. Get medical attention for extensive burns. **DO NOT** try to remove the solidified material. See section 4.



**CAUTION!** When heated, this material may vent toxic levels of hydrogen sulfide ( $H_2S$ ) vapors that accumulate in the vapor spaces of storage and transport compartments.  $H_2S$  vapors can cause eye, skin, and respiratory tract irritation and asphyxiation.



**CAUTION!** Aspiration Hazard Category 1 (highest). Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration. Aspiration is the entry of a liquid or solid directly through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system.

# SECTION 2 - HAZARDS IDENTIFICATION (continued)

### **Potential Health Effects:**

- **Inhalation:** Vapors and fumes from hot material can be unpleasant and may cause nausea, headache, and respiratory irritation. Hydrogen sulfide (H<sub>2</sub>S) gas can be present in the vapor space of storage tanks and bulk transport compartments (see sections 7, 8, & 11). H<sub>2</sub>S concentrations of 700-1000 ppm can be extremely hazardous or fatal.
- Skin contact: Hot product causes severe burns. Contact with unheated material may cause mild skin irritation.

#### Eye contact: Hot product causes severe burns. Vapors and fumes from hot material may cause eye irritation.

**Ingestion:** Hot product causes severe burns. Swallowing unheated material may cause irritation. This material can get into the lungs during swallowing or vomiting. May be fatal if swallowed and product enters airways.

R-10: Flammable

R-36/37/38: Irritating to eyes, respiratory system and skin.

S-16: Keep away from sources of ignition - No smoking.

S-23: Do not breathe vapor / fumes.

S-24/25: Avoid contact with skin and eyes.

S36/39: Wear suitable protective clothing and eye/face protection.

# **SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS**

Cutback.

Components	CAS #	Weight %
Asphalt	8052-42-4	0-80
Gilsonite	12002-43-6	0-35
Aliphatic Hydrocarbons (Stoddard)	8052-41-3	20-60

Asphalt products can contain trace amounts of hydrogen sulfide as a contaminant. This is not an intentional ingredient and will not be released unless the product is heated.

### **SECTION 4 - FIRST AID MEASURES**

- **Eye Contact:** If this product comes in contact with the eyes, flush with plenty of water for at least 15 minutes and seek medical attention.
- **Skin Contact:** If this product comes in contact with skin, remove material with mineral oil or vegetable oil, then wash with soap and plenty of water. If the contact is with hot material over a large area of the body, cool area with water. Do not use iced water or cold packs if burned area covers more than 10% of body --it may contribute to shock. Get medical attention for large burns or if irritation from contact persists. Skin contact with clothing saturated with solvent can cause severe burns. Contaminated clothing should be removed immediately and excess material wiped from the skin.
- **Inhalation:** If breathing difficulties, dizziness, or lightheadedness occur when working in areas with vapor concentration, victim should seek air free of vapors. If victim experiences continued breathing difficulties, administer oxygen until medical assistance can be rendered. If breathing stops, begin artificial respiration and seek immediate medical attention.
- **Ingestion:** If this product is swallowed, <u>DO NOT INDUCE VOMITING</u>. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek immediate medical attention. <u>NOTE TO PHYSICIAN</u>: Perform gastric lavage in accordance with procedure for ingestion of petroleum products.

# **SECTION 5 - FIRE FIGHTING MEASURES**

Flammable liquid and vapor.

Flammability of the Product:	May ignite and burn at temperatures exceeding the flash point.		
Flash Point (TCC):	104°F Min.		
Explosive Limits:	LEL = 1 % UEL = 6 %		
Extinguishing Media:	Foam, carbon dioxide ( $CO_2$ ), or dry chemical. Water may be used to cool containers exposed to heat.		
Fire Fighting Procedures:	Vapors are heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Minimize breathing vapors, gases or fumes of decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces.		
Unusual Fire Hazards:	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

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. Do not touch or walk through spilled material. Shut off leaks if possible without personal risks.

Eliminate sources of ignition. Add sand, earth, or other suitable absorbent to spill area. Let cool, if hot. Transfer to suitable containers. Avoid sparks or hot metal surfaces.

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**

### Handling Procedures:

Avoid open flames. Use non-sparking tools. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Vapors are heavier than air and may travel along the ground or be moved by ventilation to locations distant from the point of material handling. To prevent ignition, avoid smoking, keep away from heat, open flames, and sources of static or electrical sparking. Use explosion proof motors and equipment. Tank trucks or other containers should be grounded and/or bonded when the material is transferred.

Toxic quantities of hydrogen sulfide ( $H_2S$ ) may present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if  $H_2S$  is present. See Protective Equipment section. DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR OR self-contained breathing equipment.

Use with adequate ventilation. Minimize breathing vapor, mist, and fumes. Avoid prolonged and repeated contact with skin. 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. Do NOT take internally. **NEVER SIPHON BY MOUTH.** 

### **SECTION 7 - HANDLING AND STORAGE (continued)**

Adhere to good hygienic practices. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

#### **Storage Procedures:**

Store in accordance with local regulations, in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. **Do not transfer product to unmarked containers.** Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.. Do not reuse container.

Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges

## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the exposure limits indicated below. All electrical equipment should comply with the National Electrical Code. An emergency eye wash station and safety shower should be located near the work-station.

Exposure guidelines:

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Hazardous Components	CAS #	OSHA PEL	ACGIH TLV	REL Ceiling
Asphalt	8052-42-4	N.E	*5mg/m <sup>3</sup>	*5mg/m <sup>3</sup>
Aliphatic Hydrocarbons (Stoddard)	8052-41-3	100 ppm	100 ppm	$350 \text{mg/m}^3$

\* = Exposure guidelines for asphalt fumes from heating.

N.A. = Not Applicable	OSHA = Occupational Safety and Health Administration
N.E. = Not Established	ACGIH = American Conference of Governmental Industrial Hygienists
PEL = Permissible Exposure Limits	NIOSH = National Institute for Occupational Safety and Health
TLV = Threshold Limit Value	

**Respiratory Protection**: Use supplied-air respirator in confined areas or when vapors exceed exposure guidelines.

Ventilation:	Local Exhaust:	In enclosed areas.
	Mechanical:	In enclosed areas.
Eye Protection:		Safety glasses or face shield for liquid and/or hot material.
Protective Gloves:		Solvent impervious gloves. Insulated gloves when handling hot material.
Other Protective Clothin	ng Equipment:	Long sleeves and impervious clothing to protect from splashing.
Work/Hygienic Practice	s:	See Section 7.



# **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance and Odor:	Brown to Black Liquid. Petroleum odor		
Vapor Pressure (mm Hg.) @ 20°C Volatiles:	3		
<b>Boiling Point °F Volatiles:</b>	300-390°	Evaporation Rate (Butyl Acetate=1) @77°F:	0.2
Melting Point °F (Ring & Ball):	N/A	Vapor Density (Air = 1) @ 20°C Volatiles:	>4
Solubility in water:	Insoluble	Flash Point °F (Closed Cup):	104°F Min
Specific Gravity (H <sub>2</sub> O =1):	0.85 - 0.97	-	

### **SECTION 10 - STABILITY AND REACTIVITY**

Stability:	Stable
Conditions to Avoid:	Keep away from heat, sparks, open flames and strong oxidizing agents. Auto-ignition temperature unknown.
Incompatibility (Materials to Avoid):	Strong oxidizers.
Hazardous Decomposition or Byproducts:	Combustion: carbon dioxide (CO <sub>2</sub> ), carbon monoxide (CO), sulfur oxides (SO <sub>x</sub> ), hydrogen sulfide (H <sub>2</sub> S), smoke, fumes.
Hazardous Polymerization:	Not expected to occur.

# SECTION 11 - TOXICOLOGICAL INFORMATION

Product may cause respiratory irritation, headache, dizziness, nausea and vomiting. Prolonged or repeated contact with skin may cause dermatitis.

Carcinogenicity: NTP? No IARC Monograph? No OSHA Regulated? No

### ADDITIONAL HEALTH DATA:

#### **ASPHALT:**

No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IARC) has recently reviewed the carcinogenic potential of asphalts. They concluded that there was insufficient evidence that undiluted, air-refined asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally, there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to produce any serious effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes, or vapors should be reduced to a minimum. We strongly recommend that the precautions outlined in this SDS be followed when handling this material.

### SOLVENT:

Hydrocarbon solvents derived from petroleum may cause irritation when in contact with eyes and skin. Prolonged or repeated contact with skin can cause dermatitis. Systemic effects of these solvents are respiratory tract irritation, central nervous system depression (narcosis) in high concentration, nausea, vomiting, and possible damage to liver and kidneys. No known studies have associated these solvents with carcinogenic activity. Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration. Aspiration is the entry of a liquid or solid directly through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system.

# **SECTION 12 - ECOLOGICAL INFORMATION**

EPA Hazard Classification Code:

Acute Hazard:	Chronic Hazard:	_ Fire Hazard:	_ Pressure Hazard:	
Reactive Hazard:	Not Applicable:	<u>X</u>		
Ecotoxicity effects:	Product can foul shore chronic toxicity to aqu	eline and damage plant l uatic organisms due to it	ife. This product is not exp s extremely low water solu	pected to cause any acute or ubility.

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

Material Disposal:Recover or recycle if possible. Recovered non-usable material may be regulated by US EPA as a hazardous<br/>waste due to its ignitibility.<br/>Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to<br/>contaminate soil or water. Dispose of in accordance with local, state and federal regulations.

Container Disposal: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Refer to Section 7 before handling the product or containers. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to a drum or metal recycler.

## **SECTION 14 - TRANSPORTATION INFORMATION**

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

DOT Shipping Name:	Cutback
DOT Label Information:	Flammable liquid
DOT Hazard Class:	3
DOT ID Number: 1999	UN-1999
DOT Packing Group:	III

IMDG:

Identification number: UN 1999 Proper shipping name: Tars, Liquid, including road oils, and cutback bitumens. Class / Division: 3 Packing group: III Marine pollutant: Not a DOT "Marine Pollutant" per 49 CFR 171.8.

# **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)

This product contains the following chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372:

	CAS NUMBER	WEIGHT %
1,2,4 - Trimethylbenzene	95-63-6	0 - 2

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

**TOSCA, CANADIAN DSL:** All components are on the TOSCA and DSL inventories.

REACH (Registration, Evaluation and Authorization of Chemicals) status: All ingredients are pre-registered with REACH.

## **SECTION 16 - OTHER INFORMATION**

Some asphalt contains sulfur compounds which may form hydrogen sulfide ( $H_2S$ ) when heated. The rotten eggs odor of  $H_2S$  is unreliable as an indicator of concentration because it may be entirely masked by the odor of the asphalt. Signs and symptoms of overexposure to  $H_2S$  include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbance, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness.  $H_2S$  concentrations of 700-1000 ppm can be extremely hazardous or fatal.

NFPA 704 Rating (Health, Flammability, Instability): 2, 2, 0 HMIS III Rating (Health, Flammability, Physical Hazard): 2, 2, 0

#### **Revision Statement:**

This Safety Data Sheet has been revised to remove obsolete product trade names. Supersedes: February 3, 2016

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.