



## Safety Data Sheet

Prepared according to GHS

### 1. Identification

**Product Name** Kendex® 0842  
**Product Code** 4313  
**Recommended Use** Asphalt Modifier. Metal working applications.  
**Company** American Refining Group, Inc.  
77 North Kendall Avenue  
Bradford, PA 16701  
www.amref.com  
msds@amref.com  
**Emergency Telephone Number(s)** Chemtrec 1-800-424-9300 (24 HRS)  
ARG: 814-368-1297 (24 HRS)

### 2. Hazards Identification

**GHS Classification** Skin Corrosion/Irritation Category 2  
**Signal Word** WARNING!  
**Hazard Statements** Causes Skin Irritation  
**GHS Pictogram**



**Precautionary Statements** Wash Thoroughly after handling.  
Wear protective gloves  
If on skin: wash with plenty of soap and water.  
If skin irritation occurs: get medical attention/advice.  
Take off contaminated clothing and was before reuse.

### 3. Composition / Information on Ingredients

CAS No.	Component	Common Name	Percent
64741-45-3	Residues (petroleum), atm. Tower	Cylinder Stock	100%

### 4. First Aid Measures

**Eyes** Check for and remove any contact lenses. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation develops..

#### 4. First Aid Measures

<b>Skin</b>	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops..
<b>Inhalation</b>	Move exposed person to fresh air. Get medical attention if irritation develops.
<b>Ingestion</b>	DO NOT INDUCE VOMITING. Seek medical attention immediately.
<b>Symptoms(Acute and delayed)</b>	May cause minimal eye irritation, minimal to moderate skin irritation.
<b>Note to Physicians</b>	No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

#### 5. Fire Fighting Measures

##### **Suitable Extinguishing Media**

Use dry chemical, CO<sub>2</sub>, water spray (FOG) or foam

##### **Unsuitable Extinguishing Media**

Avoid solid water stream as it may scatter and spread fire.

##### **Specific Hazards Arising from Chemical**

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposing products may include the following materials: Carbon dioxide and Carbon monoxide.

##### **Protective Equipment and Precautions for Firefighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### 6. Accidental Release Measures

##### **Personal Precautions**

Put on appropriate personal protective equipment.

##### **Environmental Precautions**

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

##### **Methods for Containment**

Stop leak if without risk.

##### **Methods for Cleanup**

A vapor suppressing foam may be used to reduce vapors. Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled container

#### 7. Handling and Storage

##### **Handling Procedures**

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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist.

##### **Shipping and Storing Procedures**

Keep container tightly closed in a dry place. Keep away from heat. Protect from light. Keep in properly labeled containers. Keep out of the reach of children.

**7. Handling and Storage**

**Incompatibilities:**

Oxidizing Agents

**8. Exposure Controls / Personal Protection**

**Component Exposure Limits**

**Oil Mist (Mineral)**

<b>ACGIH TLV:</b>	TWA: N/A ppm	TWA: 5 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: 10 mg/m <sup>3</sup>
<b>OSHA PEL:</b>	TWA: N/A ppm	TWA 5 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: N/A mg/m <sup>3</sup>
<b>NIOSH REL:</b>	TWA: N/A ppm	TWA 5 mg/m <sup>3</sup>	STEL: N/A ppm	STEL: 10 mg/m <sup>3</sup>

N/A signifies not available

\*Product has 0 kPa pressure at 68°F and is not expected to present any inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Oil mist, if generated, is considered hazardous according to the OSHA Hazard Communication Standard.

**Engineering Controls**

Material should be handled in enclosed vessels and equipment only if aerosolized and/or misted. Use only in adequate ventilation if this occurs. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eye/Face Protection**

Chemical goggles or face shield.

**Skin Protection**

Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

**Respiratory Protection**

No special requirements under ordinary use and with adequate ventilation. Respiratory may only be needed if product is aerosolized and/or misted.

**General Hygiene**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

**9. Physical and Chemical Properties**

*Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Please see the Product Specification Sheet for further information.*

<b>Appearance</b>	Opaque	<b>Flammability</b>	Not Available
<b>Physical State</b>	Liquid	<b>Upper/Lower Flammability Limits</b>	Not Available
<b>Odor</b>	Petroleum oil	<b>Vapor Pressure</b>	Not Available
<b>Odor Threshold</b>	Not Available	<b>Vapor Density</b>	Not Available
<b>pH</b>	Not Available	<b>Relative Density (lbs/gal)</b>	7.53
<b>Melting/Freezing Point (°F)</b>	Not Available	<b>Water Soluble</b>	No
<b>Initial Boiling Point (°F)</b>	>625	<b>Partition Coefficient: n-octanol/water</b>	1.7-25
<b>Boiling Range (°F)</b>	Not Available	<b>Auto-ignition Temperature (°F)</b>	Not Available
<b>Flash Point (°F)</b>	590	<b>Decomposition</b>	Not Available

**9. Physical and Chemical Properties**

		<b>Temperature (°F)</b>	
<b>Evaporation Rate</b>	Not Available	<b>Viscosity @ 40°C, cSt</b>	795

**10. Chemical Stability & Reactivity Information**

<b>Reactivity</b>	Polymerization will not occur
<b>Chemical Stability</b>	Stable under normal conditions
<b>Hazardous Reactions</b>	None, under normal processing.
<b>Conditions to Avoid</b>	High temperatures, flames, sparks
<b>Incompatibility</b>	Strong acids and oxidizing materials
<b>Hazardous Decomposition Products</b>	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

**11. Toxicological Information**

<b>Acute Exposure</b>	No data available to indicate product or components at greater than 1% are acute health hazards. Primary route of exposure is dermal.
<b>Respiratory Irritation</b>	An inhalation hazard may only arise if product is used in aerosol conditions or if heated up. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and upper respiratory tract.
<b>Eye Irritation</b>	Minimal eye irritation. Vapors formed from heating may cause eye irritation
<b>Skin Irritation</b>	Causes minimal to moderate skin irritation. Redness may occur, varies with exposure.
<b>Sensitization</b>	This product is not a sensitizer.
<b>Chronic Exposure</b>	
<b>Target Organ Effects</b>	
<b>Carcinogenicity</b>	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to have a Mutagenicity Index of <1 by the Modified Ames test.
<b>Mutagenicity</b>	This product contains mineral oils which are considered to be severely refined and not considered to be mutagenic under IARC. All of the oils in this product have been demonstrated to have a Mutagenicity Index of <1 by the Modified Ames test.
<b>Reproductive Toxicity</b>	No data available to indicate either product or components present at greater than .1% that may cause reproductive toxicity.
<b>Teratogenicity</b>	No data available to indicate product or any components contained at greater than .1% may cause birth defects.

**Analysis – LD50 / LC50**

<b>Inhalation LC50 Rat</b>	Not available	mg/L 4h
<b>Oral LD50 Rat</b>	>5000	mg/kg
<b>Dermal LD50 Rabbit</b>	>2000	mg/kg

**12. Ecological Information**

**Component Analysis- Ecotoxicity – Aquatic Life**

Duration/Test/Species	Concentration/Conditions
96 hr LL50 Aquatic Vertebrates	>1000 mg/L
96 hr EL50 Algae	>220; <460 mg/L
7 Day EL50 <i>Daphnia magna</i>	>1000 mg/L

<b>Persistence &amp; Degradability</b>	Inherently biodegradable
<b>Bioaccumulation Potential</b>	Not Available
<b>Soil Mobility</b>	The constituents with heavier molecular weights may float or sink, when in contact with water, depending on density relations. These constituents will eventually become incorporated with the soil and may participate, at least partially, with microbes in biodegradation.
<b>Other Adverse Effects</b>	Data for heavy fuel oils showed slight or no acute toxicity to fish when tested as either WAFs or OWDs



**13. Disposal Considerations**

**Disposal Instructions**

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

**14. Transportation Information**

**Emergency Response Guide No.** 171 *North American Emergency Response Guide Book*

	UN Number	Shipping Name (technical name)	Hazard Class	Packing Group	Placard/Label
<b>U.S. DOT</b>		Not Regulated			
<b>IMDG</b>	3082	Environmentally Hazardous Substance, Liquid, N.O.S. (Petroleum Distillate)	9	III	
<b>IATA</b>	3082	Environmentally Hazardous Substance, Liquid, N.O.S. (Petroleum Distillate)	9	III	
<b>STCC</b>		2911425			

**15. Regulatory Information**

**SARA Extremely Hazardous Substances (Sections 302 & 304)**

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA Section 313**

This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**SARA Section 311 & 312 Classifications**

**Physical Hazards** No  
**Health Hazards** Yes

*Skin Irritant*

**CERCLA**

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**California Prop 65**

This product is not routinely tested to determine chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

**Global Chemical Inventories**

Inventory	
US TSCA	Present
EU	Present
Japan	Not available
Australia	Present
New Zealand	Not available
Canada	Present
Switzerland	Not available
Korea	Present
Philippines	Present
China	Present
Taiwan	Present

**16. Other Information**

**US NFPA Ratings**

Health	Fire	Reactivity
1	1	0

**HMIS Ratings**

Health	Fire	Physical Hazards
1	1	0

**16. Other Information**

**Revision Reason**

Section 3

*The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.*

**End of SDS**