Residues (petroleum), vacuum.

Product Code: AR2815.

CAS 64741-56-6

Version 1.1

Effective Date 01.08.2012

Regulation 1907/2006/EC

MATERIAL SAFETY DATA SHEET

---

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING :

Material Name : Residues (petroleum), vacuum. CAS NO : 64741-56-6

%W : 0 – 100%

Chemical Name : Residual Fuel Oil.

Pack : 118 mL

Product Code : AR2815 : 2% : Weight Percent Sulfur = 2.03 : Standard Deviation = 0.08

Manufacturer Contact Details:

Alpha Resources, Inc.

P.O. Box 199

Stevensville, MI 49127

Telephone: 269-465-5559

e-mail: marketing@alpharesources.com

Web.: www.alpharesources.com

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING! This product is flammable when heated to high temperature. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury. This product may be irritation to the eyes, skin and respiratory system. Ingestion of inhalation of heated vapors or mists may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. May cause skin cancer. Avoid contact. Prevent entry into drains, ditches a, sewers and waterways.

POTENTIAL HEALTH EFFECTS

EYES: Causes irritation.

SKIN: Causes irritation. Prolonged and repeated contact may cause various skin disorders such as dermatitis, folliculitis, oil acne or skin cancer.

INHALATION: Excessive inhalation of this material causes headache, dizziness, nausea and loss of coordination. Inhalation of heated vapors or mists may cause headache, dizziness, nausea and loss of coordination. Aspiration of liquid in to the lungs can cause mild to severe pulmonary injury.

INGESTION: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Swallowing or vomiting of liquid may cause aspiration into the lungs. Aspiration of liquid into the lungs can cause mild to severe pulmonary injury.

Label Elements

Labeling according to Regulation (EC) No 1272/2008

Symbol(s) : No symbol

Signal Words : No signal word

CLP Hazard Statements : PHYSICAL HAZARDS:
Not classified as a physical hazard under GHS criteria.

HEALTH HAZARDS:
Not classified as a health hazard under GHS criteria.

ENVIRONMENTAL HAZARDS:
Not classified as an environmental hazard under GHS criteria.

CLP Precautionary statements

Prevention : No precautionary phrases.

Response : No precautionary phrases.

Storage : No precautionary phrases.

Disposal : No precautionary phrases.

Labeling according to Directive 1999/45/EC / 67/548/EEC

EC Symbols : No Hazard Symbol required

EC Classification : Not classified as dangerous under EC criteria.

EC Risk Phrases : Not classified.

EC Safety Phrases : Not classified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

CAS No. : 64741-56-6

Mixtures

Mixture Description : A blend of components derived from crude petroleum oil.

Product is not a mixture according to regulation 1907/2006/EC.

Hazardous Components

Classification of components according to Regulation (EC) No 1272/2008

Chemical Name	CAS No.	EINECS	REACH Registration	Conc.
Asphalt	8052-42-4	232-490-9	01-2119480172-44	0,00 - 100,00%
Residues (petroleum), vacuum	64741-56-6	265-057-8	01-2119498291-32	0,00 - 100,00%

Chemical Name	Hazard Class & Category	Hazard Statement
Asphalt	None, None;	None;

Residues (Petroleum),Vacuum	None,None;	None;

Classification of components according to 67/548/EEC

Chemical Name	CAS No.	EINECS	REACH Registration No.	Symbol(s)	R-phrase(s)	Conc.
Asphalt	8052-42-4	232-490-9	01-2119480172-44			0,00 - 100,00%
Residues (petrolem) vacuum	64741-56-6	265-057-8	01-2119498291-32			0,00 - 100,00%

Additional Information : Contains hydrogen sulphide, CAS # 7783-06-4.

Hydrogen sulphide may be present both in the liquid and the vapour. Composition is complex and varies with the source of the crude oil.

4. FIRST AID MEASURES

EYES: Flush with large amounts of water. If irritation persists, get medical attention.

INHALATION: Removed from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If respiratory irritation, dizziness, nausea or unconsciousness occurs, get medical attention. WARNING: Contact through mouth-to-mouth resuscitation may pose a secondary risk to the rescuer. Avoid mouth-to-mouth contact by using a mouth shield or guard to perform artificial respiration.

SKIN: Wash skin with plenty of soap and water. Remove and launder contaminated clothing before reuse.

INGESTION: Material is not expected to be absorbed from the gastrointestinal tract. Do not induce vomiting. Call a physician.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flammable

Flash Point: > 266 F Pensky-Martens, closed cup

Flammable Limits: (% by Volume in Air): Lower: 1% estimated Upper: 5% estimated

AUTO-IGNITION TERMERATURE: >500 F

HAZARDOUS COMBUSTION PRODUCTS: Upon combustion, this product emits carbon monoxide, carbon dioxide, sulfur oxides and/or low molecular weight hydrocarbons and toxic (acidic) gases

EXTINGUISHING MEDIA: Dry chemical, foam, carbon dioxide, water spray or fog. Use water to cool fire-exposed containers and to protect personnel. Water may be an ineffective extinguishing medium. FIREFIGHTING INSTRUCTIONS: Position upwind. Keep unnecessary personnel away. Move containers from fire area if you can do so without risk. Fight fire from maximum distance or use unmanned holders or monitor nozzles. Immediately withdraw in case of fire and tank venting or heat discoloration of a tank. Fire fighters should wear full-face, self-contained breathing apparatus and thermal protective clothing. Avoid inhaling any smoke and combustion products. Remove and clean or destroy any contaminated clothing. Cool containers with flooding quantities of water until well after the fire is out. Control runoff waters to prevent entry into sewers, drains, ditches , underground or confined spaces and waterways.

6. ACCIDENTAL RELEASE MEARURES

SMALL SPILL: Stop discharge if it is safe to do so. Absorb spill with inert material. Shovel material into appropriate container for disposal.

LARGE SPILL: Eliminate ignition sources. Keep upwind and out of low areas. Stop discharge if safe to do so. Contain discharge by booming on water or diking on ground. Remove material with approved non-sparking pumps, skimmers or vacuum equipment. Absorb/adsorb material with

DRY earth, sand or other non-combustible materials. Soil remediation may be required. Prevent entry into drains, ditches, sewers and waterways.

7. HANDLING AND STORAGE

HANDLING: Keep locked up or secure. Handle in fully grounded, properly designed and approved equipment systems that are suitable for flammable liquids. Use with adequate ventilation. Do not ingest or inhale. Keep away from heat and ignition sources. No smoking or open flames permitted in storage, use or handling areas. Take special precautions when cold cutting or breaking into lines, or when cleaning and disposing of empty containers. Do not breathe gas, fumes, vapor or spray. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately. Avoid contact with skin and eyes. Keep away from incompatible materials such as oxidizing agents and strong acids. After handling, always wash hands thoroughly with soap and water.

STORAGE:

Storage area should be clearly identified, well-illuminated, clear of obstruction and accessible only to trained and authorized personnel. Store in grounded properly designed and approved vessels and away from incompatible materials. Store and use away from heat, sparks, open flame, or any other ignition source. Store according to applicable regulations. Have appropriate extinguishing capability in storage area. (e.g. sprinkler system, printable fire extinguishers) and flammable gas detectors. Prevent soil contamination. Keep absorbents for leaks and spills readily available. Storage tanks should be above ground and diked to hold entire contents.

Conditions for safe storage, including any incompatibility.

Storage Temperature: Temperature should be kept at least 30°C below flash point and should never exceed the industry recommended maximum safe working temperature of 200°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Engineering methods to reduce hazardous exposure are preferred controls. Methods include mechanical ventilation process or personal enclosure, remote and automated operation, control of process conditions, lead detection and repair systems and other process modifications. Ensure all exhaust ventilation systems are discharges to outdoors, away from air intakes and ignition sources. Supply sufficient replacement air to make up for air removed by exhaust systems. Administrative controls and use of person al protective equipment may also be required.

RESPIRATORY PROTECTION: If engineering controls and ventilation are not sufficient to prevent buildup of aerosols or vapors, appropriate NIOSH approved air-purifying respirators or self-contained breathing apparatus appropriate for exposure potential should be used. SKIN AND HAND PROTECTION: Wear chemical-resistant gloves. EYE AND FACE PROTECTION: Safety goggles.

OTHER PROTECTIVE EQUIPMENT: Wear suitable protective clothing as needed.

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Control Parameters.

Occupational Exposure Limits

Material	Source	Type	Ppm	mg/m3	Notation
Hydrogen Sulphide	ACGIH	TWA	1 ppm		
	ACGIH	STEL	5 ppm		
	NL OEL	TGG		2,3 mg/m3	

Additional Information:

Product has a low volatility and at ambient temperature fume formation will be low.

Avoid vapours from heated materials to prevent exposure to potentially toxic/irritating fumes.

Biological Exposure Index (BEI) No biological limit allocated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

APPEARANCE : Clear, colorless to amber, aromatic, volatile liquid.

BOILING POINT : 600 – 1130 F

FREEZE-MELT POINT : 53 – 104 F

VAPOR PRESSURE : <7

VAPOR DENSITY : 1

SOLUBILITY IN WATER : Negligible

SPECIFIC GRAVITY : 91

pH : N/A

ODOR : Hydrocarbon/petroleum odor

AUTO IGNITION TEMP : >500 F

EVAORATION RATE : slow, only partially volatile

SOLUBILITY IN OTHER SOL : Soluble.

DYNAMIC VISCOSITY : Data not available

KINEMATIC VISCOSITY : Data not available

HYGROSCOPICITY : Negligible

DECOMPOSITION TEMP	:	Data not available
FLAMMABILITY	:	No
Other Information	**:**	**Not applicable.**

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY: Heat, spark or open flame. May react with oxidizing agents or strong acids. Heated vapors or mists may form explosive mixtures in air.

HAZARDOUS DECOMPOSITION PRODUCTS: Upon decomposition, this product emits carbon monoxide, carbon dioxide, sulfur oxides and/or low molecular weight hydrocarbons and toxic (acidic) gases.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION.

Information on Toxicological effects

Basis for Assessment: Information given is based on product testing, and/or similar products, and/or components.

Acute Oral Toxicity: Low toxicity: LD50 > 5000 mg/kg , Rat

Acute Dermal Toxicity: Expected to be of low toxicity: LD50 >2000 mg/kg , Rabbit

Acute Inhalation Toxicity : Low toxicity by inhalation. Avoid vapours from heated materials to prevent exposure to potentially toxic/irritating fumes.

Skin corrosion/irritation: Expected to be slightly irritating. Contact with hot material can cause thermal burns which may result in permanent skin damage.

Serious eye damage/irritation : Expected to be slightly irritating. Hot product may cause severe eye burns and/or blindness.

Respiratory Irritation : Inhalation of vapours or mists may cause irritation to the respiratory system.

Respiratory or skin sensitization : Not expected to be a skin sensitiser.

Aspiration Hazard : Not considered an aspiration hazard.

Germ cell mutagenicit :Not considered a mutagenic hazard.

Carcinogenicity: Bitumens contain low concentrations of Polycyclic Aromatic Compounds (PACs). At ambient temperatures and in undiluted bitumens these PACs are not considered to be bio-available. However, if bitumens are mixed with diluents to obtain a low viscosity at ambient temperatures, or heated it is believed that such materials may become bio-available. A two-year inhalation study that exposed rats to fumes collected from an air-rectified asphalt was negative. Occupational exposures to

hard bitumens and their emissions during mastic asphalt work are 'possibly carcinogenic to humans' (IARC Group 2B). Occupational exposures to straight-run bitumens and their fume condensates during road paving are possibly carcinogenic to humans' (IARC Group 2B).

Reproductive and Developmental Toxicity: Not expected to impair fertility. Not expected to be a developmental toxicant.

Specific target organ toxicity - single exposure: Not expected to be a hazard.

Specific target organ toxicity – repeated exposure: Not expected to be a hazard.

12. ECOLOGICAL INFORMATION

Basis for Assessment: Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Toxicity Acute Toxicity : Poorly soluble mixture. May cause physical fouling of aquatic organisms. LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.

Fish : Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l

Aquatic crustacean : Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l **Algae/aquatic plants** : Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l **Microorganisms** : Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l Chronic Toxicity **Fish** : NOEC/NOEL expected to be > 100 mg/l (based on modeled data)

Aquatic crustacean : NOEC/NOEL expected to be > 100 mg/l (based on modeled data)
Persistence and degradability : Expected to be not readily biodegradable.

Bioaccumulative Potential : Has the potential to bioaccumulate.

Mobility : Adsorbs to soil and has low mobility. In water will either float or sink, showing little tendency to disperse, the product will adsorb to the sediment.

Result of PBT and vPvB assessment : The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

Other Adverse Effects : Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential

13. DISPOSAL CONSIDERATION

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

14. TRANSPORTATION INFORMATION

USA DOT: Not Regulated

15. REGULARTORY INFORMATION

US FEDERAL REGULATIONS

None of this product's components are listed under SARA Section 302, SARA Section 313, or CERCLA.

TOXIC SUBSTANCES CONTRAL ACT (TSCA): This product is listed on the EPA TSCA Inventory.

CANADIAN

REGULATIONS WHIMS:

B3, D2B

16. OTHER INFORMATION

SUPPLEMENTAL INFORMATION

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: Rev-2, 01-08-2013.

Prepared by : Greg Molter