

 Safety Data Sheet

 According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

 Revision Date: 06/16/2015
 Date of issue: 06/16/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier	
Product Form: Substance	
Product Name: Asphalt	
Synonyms: Asphalt Flux	
1.2. Intended Use of the Product	
Use of the substance/mixture: No use is	specified.
1.3. Name, Address, and Telepho	ne of the Responsible Party
Company	
Countrymark Refining and Logistics, LLC	
1200 Refinery Road	
Mt. Vernon, Indiana 47620	
(812) 838-8165	
CountryMark.com	
1.4. Emergency Telephone Numb	Jer in the second s
Emergency Number	: CountryMark: (812) 838-8165 (CHEMTREC) (800) 424-9300
SECTION 2: HAZARDS IDENTIFICAT	ION
2.1. Classification of the Substand	ce or Mixture
Classification (GHS-US)	
Carc. 2 H351	
Full text of H-phrases: see section 16	
2.2. Label Elements	
GHS-US Labeling	
Hazard Pictograms (GHS-US)	
	GH508
Signal Word (GHS-US)	: Warning
Hazard Statements (GHS-US)	: H351 - Suspected of causing cancer.
Precautionary Statements (GHS-US)	: P201 - Obtain special instructions before use.
	 P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves, protective clothing, and eye protection. P308+P313 - If exposed or concerned: Get medical advice/attention. P405 - Store locked up. P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Transported at elevated temperatures. Contains a small amount of hydrogen sulfide. Hydrogen sulfide is a fatal, and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. Heating of this product and storage under elevated temperatures or over long periods of time may release higher amounts of hydrogen sulfide. Hydrogen sulfide is also an asphyxiant. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas. Vapor in the headspace of tanks and containers may ignite and explode at temperatures exceeding auto-ignition temperature. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Repeated exposure may cause skin dryness or cracking. ASPHALT is manufactured by blending high viscosity atmospheric tower bottoms and vacuum tower bottoms to meet the viscosity specifications desired. Heavy residual fuels are complex mixtures of relatively high molecular weight compounds. Since they are blended from fractions with boiling points ranging from 650° to 1,200° F, the typical molecular weight range of the compounds is 600 to 1,000. Compound types include asphaltenes, polar aromatics, naphthene-aromatics, saturated hydrocarbons and heteromolecules containing sulfur, oxygen, nitrogen and metals.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name	: Asphalt
Name	. Asphalt

Name	Product Identifier	%	Classification (GHS-US)
Asphalt	(CAS No) 8052-42-4	100	Carc. 2, H351

3.2. Mixture

Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.

First-aid Measures After Skin Contact: Rinse immediately with plenty of water. Remove contaminated clothing. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. Seek medical attention for thermal burns. Do not attempt to forcibly remove material from skin after cooling. Removal of solidified molten material from skin requires medical assistance.

First-aid Measures After Eye Contact: Flush with large amounts of water, lifting upper and lower lids occasionally for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists. Removal of solidified molten material from the eyes requires medical assistance.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Suspected of causing cancer. During processing, inhalation of fumes may cause dizziness and/or irritation to the eyes, nose, and throat. Hot molten product will cause thermal burns to the skin.

Symptoms/Injuries After Inhalation: Inhalation of fumes or vapors may cause respiratory irritation. WARNING: irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500ppm can cause rapid unconsciousness and death if not promptly revived.

Symptoms/Injuries After Skin Contact: May cause skin irritation. Prolonged or repeated contact with the skin may cause dermatitis. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Eye Contact: May cause eye irritation. Risk of thermal burns on contact with molten product. Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause nausea, vomiting, and diarrhea.

Chronic Symptoms: Suspected of causing cancer. Repeated or prolonged skin contact may cause dermatitis and defatting. Product may contain polynuclear aromatic hydrocarbons (PNAs). Evidence from animal studies indicates that prolonged exposure to various PNAs can cause cancer of the lungs, skin and other organs.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If burned by hot product, cool affected area immediately with cool water. Do not attempt to remove solidified material from skin. Seek medical attention immediately. If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Foam. Carbon dioxide (CO₂). Earth, sand, dry chemical powder or foam.

Unsuitable Extinguishing Media: Do not use water when molten material is involved, contact of hot product with water will result in a violent expansion as the water turns to steam causing explosion with massive force. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable.

Explosion Hazard: Product is not explosive. Contains a small amount of hydrogen sulfide. Hydrogen sulfide is a fatal and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. Heating of this product and storage under elevated temperatures or over long periods of time may release higher amounts of hydrogen sulfide. Hydrogen sulfide is also an asphyxiant.

Reactivity: May react with strong oxidizers, increasing risk of fire or explosion.

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water sources. Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition. Remove containers from fire area if this can be done without risk.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Other Information:** Do not add water to molten material as this may cause spattering.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (dust, vapor, mist, gas).

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Stop leak if safe to do so. If possible, stop flow of product.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Where possible allow molten material to solidify naturally.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Cool molten material to limit spreading. Allow liquid material to solidify before cleaning up. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. For liquid: pump liquid to salvage tank or truck. Remaining liquid may be taken up on sand, clay, earth, floor absorbent or other absorbent material and shoveled into non-leaking containers for proper disposal.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Protect skin and eyes from contact with molten material. Do NOT breathe (dust, vapor, mist, gas).

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Ground and bond container and receiving equipment. Smoking, open flames, and unauthorized sparking or flame-producing devices is prohibited.

Storage Conditions: Precautions to be taken when handling and storing hot asphalt: Keep all containers in upright position. Store in dry, well ventilated area away from moisture, heat, ignition, and strong oxidizers. Do not allow smoking in areas of use or dispensing. Motors, fans, switches, etc. in area of use or dispensing should be explosion proof. Ground containers when filling. Prevent all static and electric sparks.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers. Chlorine. Permanganates. Chromates.

Special Rules on Packaging: Storage containers should be dry and free of water, prior to loading hot asphalt. Dangerous overpressuring or splattering of hot asphalt can result from water infiltration.

7.3. Specific End Use(s) No use is specified.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Asphalt (8052-42-4)

	- ·- · /	
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (fume, inhalable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen fume, coal tar-free
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	5 mg/m³ (fume)

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.2. Exposure Controls	
Appropriate Engineering Controls Appropriate Engineering Controls Personal Protective Equipment	 Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Explosion-proof general and local exhaust ventilation. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Have written confined space and tank entry procedures. Never allow tank entry without checking OXYGEN AND VAPOR levels. Use safety harness and safety line on person entering a tank. Standby person required with protective equipment available. <u>WARNING</u>: Hydrogen sulfide (H₂S) and other hazardous vapors may evolve and collect in the headspace of storage tanks or other enclosed vessels. Hydrogen sulfide is an extremely flammable and highly toxic gas. Incomplete combustion may form toxic materials: Carbon dioxide, carbon monoxide, plus various unidentified organic hydrocarbons may be formed. Safety glasses. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.
Materials for Protective Clothing	: With molten material wear thermally protective clothing.
Hand Protection	: If material is hot, wear thermally resistant protective gloves and petroleum
Eye Protection	resistant gloves. : Safety glasses with side shields. Wear faceshield and goggles to protect against
	splashing.
Skin and Body Protection	: Wear suitable protective clothing.
Respiratory Protection	: If exposure limits are exceeded or irritation is experienced, approved respiratory
Thermal Hazard Protection	protection should be worn. : When working with hot material, use suitable thermally protective clothing.
Other Information	: When using, do not eat, drink or smoke.
SECTION 9: PHYSICAL AND CHEM	
9.1. Information on Basic Physi	cal and Chemical Properties
Physical State	: Liquid
Appearance	: Dark or black-colored high viscosity liquid requiring heated storage to enable pumping and preheating at the burner to permit atomization.
Odor	: Distinct petroleum odor
Odor Threshold	: No data available
рН	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: 650 - 1200 °F (343.33 - 648.89 °C)
Flash Point	: > 450 °F (> 232.22 °C)
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: < 10 mm Hg @ 60°C
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity Solubility	: 0.95 - 1.00 @ 60 °F : Insoluble in water.
Partition Coefficient: N-Octanol/Wate	

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Viscosity

: 45 - 300 SFS @ 210 °F

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** May react with strong oxidizers, increasing risk of fire or explosion.
- 10.2. Chemical Stability: Stable under normal conditions.
- **10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- **10.4.** Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.
- 10.5. Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Nitrates. Chlorine. Permanganates. Chromates.
- **10.6.** Hazardous Decomposition Products: Thermal decomposition generates : Carbon oxides (CO, CO₂). Sulfur oxides.

Nitrogen oxides. Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Asphalt (8052-42-4)		
LD50 Oral Rat	> 5000 mg/kg	
LD50 Dermal Rabbit	> 2000 mg/kg	

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

Asphalt (8052-42-4)	
IARC group	2B
National Toxicology Program (NTP) Status	Twelfth Report - Items under consideration.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of fumes or vapors may cause respiratory irritation. WARNING: irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500ppm can cause rapid unconsciousness and death if not promptly revived.

Symptoms/Injuries After Skin Contact: May cause skin irritation. Prolonged or repeated contact with the skin may cause dermatitis. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Eye Contact: May cause eye irritation. Risk of thermal burns on contact with molten product. Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause nausea, vomiting, and diarrhea.

Chronic Symptoms: Suspected of causing cancer. Repeated or prolonged skin contact may cause dermatitis and defatting. Product may contain polynuclear aromatic hydrocarbons (PNAs). Evidence from animal studies indicates that prolonged exposure to various PNAs can cause cancer of the lungs, skin and other organs.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity No additional information available

12.2. Persistence and Degradability		
Asphalt		
Persistence and Degradability	Not established.	
12.3. Bioaccumulative Potential		
Asphalt		
Bioaccumulative Potential Not established.		
Asphalt (8052-42-4)		
BCF fish 1	(no bioaccumulation expected)	
Log Pow	>6	

12.4. Mobility in Soil No additional information available

Safety Data Sheet According to Federal Register / Vol.	77, No. 58 / Monday, March 26	i, 2012 / Rules and Regulations
12.5. Other Adverse Ef	ffects	
Other Information	: /	Avoid release to the environment.
SECTION 13: DISPOSAL	CONSIDERATIONS	
13.1. Waste treatment		
		te material in accordance with all local, regional, national, and international
regulations.	·	, , , ,
Additional Information: Re	ecycle the material as far	as possible.
SECTION 14: TRANSPOR		
14.1. In Accordance wi	ith DOT	
Proper Shipping Name		ERATURE LIQUID, N.O.S. at or above 100 C and below its flash point n metals, molten salts, etc.)
Hazard Class	: 9	
Identification Number	: UN3257	
Label Codes	: 9	<u>9</u>
Packing Group	: 111	
ERG Number	: 128	
14.2. In Accordance wit	-	
Proper Shipping Name	: ELEVATED TEMPE	ERATURE LIQUID, N.O.S. at or above 100 C and below its flash point n metals, molten salts, etc.)
Hazard Class	: 9	
Identification Number	: UN3257	
Packing Group	: 111	
Label Codes	: 9	
EmS-No. (Fire)	: F-A	AIIIN
EmS-No. (Spillage)	: S-P	9
14.3. In Accordance wit	th IATA	×
Proper Shipping Name		ERATURE LIQUID, N.O.S. at or above 100 C and below its flash point n metals, molten salts, etc.)
Packing Group	: 111	
Identification Number	: UN3257	<u>A</u>
Hazard Class	: 9	
Label Codes	: 9	9
ERG Code (IATA)	: 9L	× ·
SECTION 15: REGULATO	DRY INFORMATION	
15.1 US Federal Regul		
SARA Section 311/312 Haza	ard Classes	Delayed (chronic) health hazard
Asphalt (8052-42-4)		
Listed on the United States	TSCA (Toxic Substances C	Control Act) inventory
	•	
v		
Asphalt (8052-42-4) U.S Massachusetts - Right	To Know List	
U.S New Jersey - Right to		nce list
U.S Pennsylvania - RTK (Ri		
		DING DATE OF PREPARATION OR LAST REVISION
Revision Date		: 06/16/2015
Other Information		: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
GHS Full Text Phrases:		1510.1200.

GHS Full Text Phrases:

Carc. 2	Carcinogenicity Category 2
H351	Suspected of causing cancer

Safety Data Sheet According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA Health Hazard NFPA Fire Hazard NFPA Reactivity	 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given. 1 - Must be preheated before ignition can occur. 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
HMIS III Rating Health Flammability Physical	 2 Moderate Hazard - Temporary or minor injury may occur 1 Slight Hazard 0 Minimal Hazard

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)