

1. Identification

Product identifier	Asphalt Cement (AC), PG Grade Asphalt, Pen Grade Asphalt, VTB, Saturant, Flux	
Other means of identification		
SDS number	AC2014001	
Recommended use	Industrial use.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Company name	Asphalt & Fuel Supply	
Address	4200 E. Skelly Drive, STE 600 Tulsa, OK 74135 United States	
Telephone	918-488-1339	
E-mail	matt@asphalt-fuelsupply.com	
Contact person	Matt Roberts	
Emergency telephone	CHEMTREC: 1-800-424-9300 (access CCN632693)	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, inhalation	Category 4
	Carcinogenicity	Category 1B
	Reproductive toxicity (the unborn child)	Category 2
	Specific target organ toxicity, repeated exposure	Category 2 (blood, liver, thymus)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger	
Hazard statement	Harmful if inhaled. May cause cancer. Suspected of damaging the unborn child. May cause damage to organs (blood, liver, thymus) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.	
Precautionary statement		
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Collect spillage.	
Storage	Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	Repeated exposure may cause skin dryness or cracking.	
Supplemental information	None.	

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Asphalt	8052-42-4	0 - 100
Distillates, petroleum residues	68955-27-1	0 - 100
Vaccum tower bottoms	64741-56-6	0 - 100
Hydrogen sulfide	7783-06-4	< 0.1
Polycyclic aromatic hydrocarbons	130498-29-2	< 0.1

Composition comments Dangerous amounts of hydrogen sulfide, a highly toxic gas, may be present, especially in the headspace of containers.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists. If hot product contacts skin, cool under running water and get medical attention.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists. If hot product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	In case of inhalation of fumes from heated product: Irritation of nose and throat. Coughing. Shortness of breath. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Jaundice. Repeated exposure may cause skin dryness or cracking. Direct contact with eyes may cause temporary irritation. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. Contact with hot material can cause thermal burns which may result in permanent damage. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.
General information	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. Collect runoff for recycling or disposal as potential hazardous waste.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Material will burn in a fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them. Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulfide (H₂S) and flammability. Avoid contact with hot or molten material. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Collect runoff for disposal as potential hazardous waste.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with hot or molten material. When petroleum asphalt products are heated, potentially irritating emissions (fumes, mists, and vapors) may be released. Hydrogen sulfide (H₂S) may be given off when this material is heated. Do not depend on sense of smell for warning. Do not breathe mist/vapors. Tripping incidences have occurred because of asphalt buildup on bottoms of shoes and boots; buildup should be removed regularly to prevent such incidences. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store in a well-ventilated place. The pressure in sealed containers can increase under the influence of heat. Vapors containing hydrogen sulfide may accumulate during storage or transport of asphaltic materials. Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulfide (H₂S) and flammability. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Hydrogen sulfide (CAS 7783-06-4)	Ceiling	20 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	0.5 mg/m ³	Inhalable fume.
Hydrogen sulfide (CAS 7783-06-4)	STEL	5 ppm	
	TWA	1 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	Ceiling	5 mg/m ³	Fume.
Hydrogen sulfide (CAS 7783-06-4)	Ceiling	15 mg/m ³	
		10 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Polycyclic aromatic hydrocarbons (CAS 130498-29-2)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. 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. Provide easy access to water supply or an emergency shower.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Wear a full-face respirator, if needed.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. When handling hot material, use heat resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing. Thermally protective apron and long sleeves are recommended when volume of hot material is significant.

Respiratory protection

Wear approved respiratory protection when working with this material unless ventilation or other engineering controls are adequate to keep airborne concentrations below recommended exposure standards. Follow respirator protection program requirements (OSHA 1910.134 or CSA-Z94.4-02(R2008), and ANSI / AIHA Z88.6) for all respirator use. Note: If any of the applicable hydrogen sulfide standards are likely to be exceeded, positive pressure supplied-air respiratory protection must be used.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Form

Cementitious material.

Color

Black or dark brown.

Odor

Asphalt.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling range

600 °F (315.6 °C)

Flash point

> 450.0 °F (> 232.2 °C) Cleveland Open Cup

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Relative density

0.9 - 1.5 (H₂O=1)

Solubility(ies)

Solubility (water)

Negligible.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 900 °F (> 482.22 °C)
Decomposition temperature	Not available.
Viscosity	50 - 3000 P
Viscosity temperature	140 °F (60 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized. Hydrogen sulfide. Sulfur oxides. Nitrogen oxides. Hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Harmful if inhaled. At elevated temperatures, vapor may cause irritation of respiratory tract.
Skin contact	Repeated exposure may cause skin dryness or cracking. Contact with hot product may cause severe burns.
Eye contact	Direct contact with eyes may cause temporary irritation. At elevated temperatures, vapor may cause irritation of eyes. Contact with hot product may cause severe burns.
Ingestion	Ingestion may cause irritation and malaise. Contact with hot material can cause thermal burns which may result in permanent damage.

Symptoms related to the physical, chemical and toxicological characteristics

In case of inhalation of fumes from heated product: Irritation of nose and throat. Coughing. Shortness of breath. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Jaundice. Repeated exposure may cause skin dryness or cracking. Direct contact with eyes may cause temporary irritation. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity Harmful if inhaled.

Components	Species	Test Results
Hydrogen sulfide (CAS 7783-06-4)		
<u>Acute</u>		
Inhalation		
Gas		
LC50	Rat	444 ppm, 4 Hours

Skin corrosion/irritation Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Asphalt (CAS 8052-42-4)

2B Possibly carcinogenic to humans.

Distillates, petroleum residues (CAS 68955-27-1)

2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity	Suspected of damaging the unborn child.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to organs (blood, liver, thymus) through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Hydrogen sulfide (CAS 7783-06-4)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Crustacea 0.042 mg/l, 48 Hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 0.0243 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available on bioaccumulation.

Mobility in soil The product is insoluble in water.

Other adverse effects This product contains one or more substances identified as hazardous air pollutants (HAPs) per the US Federal Clean Air Act (see section 15).

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3257
UN proper shipping name	Elevated temperature liquid, n.o.s. (Asphalt)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB1, T3, TP3, TP29

Packaging exceptions None
 Packaging non bulk None
 Packaging bulk 247

IATA

UN number UN3257
 UN proper shipping name Elevated temperature liquid, n.o.s. (Asphalt)
 Transport hazard class(es)
 Class 9
 Subsidiary risk -
 Packing group -
 Environmental hazards Yes
 ERG Code 9L
 Special precautions for user Passenger and Cargo Aircraft Quantity limitation: Forbidden.

IMDG

UN number UN3257
 UN proper shipping name ELEVATED TEMPERATURE LIQUID, N.O.S. (ASPHALT)
 Transport hazard class(es)
 Class 9
 Subsidiary risk -
 Packing group III
 Environmental hazards
 Marine pollutant Yes
 EmS F-A, S-P
 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Asphalt (CAS 8052-42-4) Listed.
 Hydrogen sulfide (CAS 7783-06-4) Listed.

SARA 304 Emergency release notification

HYDROGEN SULFIDE (CAS 7783-06-4) 100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Toxic Substances Control Act (TSCA) One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Hydrogen sulfide	7783-06-4	100	500		

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Acute toxicity (any route of exposure)
 Carcinogenicity
 Reproductive toxicity
 Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Polycyclic aromatic hydrocarbons	130498-29-2	< 0.1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Polycyclic aromatic hydrocarbons (CAS 130498-29-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Hydrogen sulfide (CAS 7783-06-4)

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Hydrogen sulfide (CAS 7783-06-4) High priority

US state regulations

US. Massachusetts RTK - Substance List

Asphalt (CAS 8052-42-4)

Hydrogen sulfide (CAS 7783-06-4)

US. New Jersey Worker and Community Right-to-Know Act

Asphalt (CAS 8052-42-4)

Distillates, petroleum residues (CAS 68955-27-1)

Hydrogen sulfide (CAS 7783-06-4)

Polycyclic aromatic hydrocarbons (CAS 130498-29-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Asphalt (CAS 8052-42-4)

Hydrogen sulfide (CAS 7783-06-4)

Polycyclic aromatic hydrocarbons (CAS 130498-29-2)

US. Rhode Island RTK

Asphalt (CAS 8052-42-4)

Hydrogen sulfide (CAS 7783-06-4)

California Proposition 65



WARNING: This product can expose you to Asphalt, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Asphalt (CAS 8052-42-4)

Listed: January 1, 1990

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Asphalt (CAS 8052-42-4)

Distillates, petroleum residues (CAS 68955-27-1)

Hydrogen sulfide (CAS 7783-06-4)

Polycyclic aromatic hydrocarbons (CAS 130498-29-2)

16. Other information, including date of preparation or last revision

Issue date 11-April-2014

Revision date 15-February-2019

Version # 03

NFPA ratings



Disclaimer

Asphalt & Fuel Supply cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.