SAFETY DATA SHEET

Prepared in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200

SECTION 1: IDENTIFICATION

PRODUCT	**SP 3-10 HARD PEN ASPHALT**
SYNONYMS	3-10 Pen
RECOMMENED USE	Industrial Specialties
RECOMMENDED RESTRICTIONS	None Known

MANUFACTURER/IMPORTER/SUPPLIER/DISTIBUTOR INFORMATION

MANUFACTURER	Standard Petroleum, LLC
ADDRESS	8700 East Pinnacle Peak, Unit 223
	Scottdale Arizona, 85255
EMAIL	business@standardpetroleumllc.com
TELEPHONE	
24-HOUR EMERGENCY	CHEMTREC North America 1-800-424-9300; International 1-703-527-3887

EMERGENCY OVERVIEW
HEALTH HAZARDS

This product is a black semi-solid with a mild odor.
Exposure to this product can be irritating to the eyes, respiratory system, and skin. Heated material can cause thermal burns. Heated material may liberate hydrogen sulfide. Long-term exposure to high concentrations of asphalt fumes may cause chronic bronchitis and pneumonitis.

ENVIRONMENTAL HAZARDS

The environmental effects of this product have not been investigated. This material is not expected to be toxic to aquatic organisms.

LABEL ELEMENTS

US DOT Symbol | Canada (WHMIS)Symbol | European and GHS Hazard Symbol

Signal Word Warning!

GHS Hazard Classification(s)
Acute Toxicity Inhalation Category 4

Hazard Statements
H319: Causes serious eye irritation
H315: Causes skin irritation
H332: Harmful if inhaled
H335: May cause respiratory irritation

Precautionary Statements
P260: Do not breathe dust/fume/gas/mist/vapors/spray
P264: Wash hands thoroughly after handling
P271: Use only in well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Hazard Symbol(s)
Warning
*Harmful if Inhaled

Risk Phrases
R26: Very toxic by inhalation
R36/37/38: Irritating to eyes, respiratory system and skin

Safety Phrases
S24/25: Avoid contact with skin and eyes
S36: Wear suitable protective clothing
S37/39: Wear suitable gloves and eye/face protection
S45: In case of accident or if you feel unwell, seek medical advice immediately.

HAZARD(S) NOT OTHERWISE CLASSIFIED (HNOC)

Molten asphalt presents a thermal hazard. Water contact can cause violent eruption of hot asphalt.

SUPPLEMENTAL INFORMATION

Vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN SULFIDE (H_2S) can be harmful or fatal if inhaled. H_2S is a flammable gas.

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS NUMBER	PERCENT
PETROLEUM ASPHALT	Bitumen, Asphalt, Asphalt Cement	8052-42-4	0 - 100
RESIDUES (Petroleum), vacuum		64741-56-6	0-60
HYDROGEN SULFIDE	H_2S	7783-06-4	0.01 - 0.1
De-odorizing agent		Proprietary	0.01 - 0.25

COMPOSTION COMMENTS

Values do not reflect absolute minimums and maximums; these values are typical and may vary from time to time. Asphaltic materials can contain hydrogen sulfide, because it is naturally occurring in the crude oil from which asphalt is derived. Hydrogen sulfide can also be present as a byproduct of asphalt processing. This Safety Data Sheet is intended to communicate potential health hazards and potential physical hazards associated with the product(s) covered by this sheet, and it not intended to communicate product specific information

INHALATION

Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product immediately, remove the victim to fresh air and provide oxygen if breathing is difficult. Get medical attention.

SKIN CONTACT

If hot asphalt strikes the skin, drench or immerse the exposed area in water to assist cooling. If available, apply iced water or ice packs to the burned area. caution: do not use iced water or cold packs if the burned area covers more than 10% of the body, as this may contribute to shock. do not try to remove asphalt from a burn after it has cooled. Seek medical attention. If cool asphalt contacts the skin, wash the area with hot soapy water. Use of a waterless hand cleaner will help to remove the asphalt.

EYE CONTACT

Flush with water for 15 minutes while holding eyelids open. Get medical attention.

INGESTION

DO NOT induce vomiting. In general, No treatment is necessary unless large quantities of product is ingested. However, get medical advice.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

Potential for severe thermal burns.

SUITABLE EXTINGUISHING MEDIA

Dry chemical or foam preferred. Water fog may be used on flat surfaces such as roads and to cool sealed vessels exposed to the fire.

UNSUITABLE EXTINGUISHING MEDIA

Do not use water on asphalt fire in tank or other containers since it may cause violent eruption and spreading of burning asphalt.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Fire may cause irritating and toxic gases or fumes may be released.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, rubber boots, and in enclosed spaces, SCBA. Structural firefighter’s protective clothing will only provide limited protection.

FIRE-FIGHTING EQUIPMENT/INSTRUCTIONS

ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use of foam or water may cause frothing.

SPECIFIC METHODS

In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Keep unnecessary personnel away. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Dike far ahead of spill for later disposal. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Allow spilled material to solidify and scrape up with shovels into a suitable container for recycling or disposal.

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with molten material. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Do not add water to hot product. This may result in frothing of the mixture causing hot asphalt to overflow the container.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. It is recommended that the storage temperature never exceed 400°F.

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

APPROPRIATE ENGINEERING CONTROLS

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

RECOMMENDATIONS FOR PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION	Safety glasses. Wear face shield if there is risk of splashes.
HAND PROTECTION	Thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.
OTHER	Normal work clothing (long sleeved shirts and long pants) is recommended. Wear 100% cotton clothing.
RESPIRATORY PROTECTION	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
THERMAL HAZARDS	During product use, there is a risk of thermal burns.

GENERAL HYGIENE CONSIDERATIONS

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.

APPEARANCE	Brown/black viscous liquid
PHYSICAL STATE	Liquid
FORM	Semi-solid at ambient temperature
COLOR	Black
ODOR	Asphalt
ODOR THRESHOLD	Not available
pH	Not available
MELTING POINT/FREEZING POINT	Not available
INITIAL BOILING POINT	> 700 °F (> 371.11 °C)
FLASH POINT	> 500.0 °F (> 232.2 °C) COC
EVAPORATION RATE	Not available
FLAMMABILITY (SOLID, GAS)	Not available
FLAMMABILITY LIMIT – LOWER (%)	Not available
FLAMMABILITY LIMIT - UPPER (%)	Not available
EXPLOSIVE LIMIT – LOWER (%)	Not available
EXPLOSIVE LIMIT – UPPER (%)	Not available
VAPOR PRESSURE	< 1 mm Hg at 70°F
VAPOR DENSITY	> 5
RELATIVE DENSITY	0.9 - 1.1
SOLUBILITY (WATER)	Insoluble
PARTITION COEFFICIENT (n-octanol/water)	Not available
AUTO-IGNITION TEMPERATURE	> 700 °F (> 371.11 °C)
DECOMPOSITION TEMPERATURE	Not available
VISCOSITY	Not available

REACTIVITY

The product is stable and non-reactive under normal conditions of use, storage and transport.

CHEMICAL STABILITY

Stable under normal temperature conditions.

POSSIBILITY OF HAZARDOUS REACTIONS
Hazardous polymerization does not occur.

CONDITIONS TO AVOID
Do not overheat product.

INCOMPATIBLE MATERIALS
Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen sulfide.

INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION	Causes digestive tract burns.
INHALATION	May cause irritation to the respiratory system.
SKIN CONTACT	Molten material will produce thermal burns.
EYE CONTACT	Molten material will produce thermal burns.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Not available

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY — Not available

COMPONENTS	SPECIES	TEST RESULTS
HYDROGEN SULFIDE (CAS 7783-06-4)		
Acute		
Inhalation		
LC50		
	Monkey	0.7 mg/l, 35 Minutes
	Mouse	> 0.024 mg/l, 960 Minutes
		1.5 mg/l, 18 Minutes
		0.38 mg/l, 410 Minutes
		0.096 mg/l, 804 Minutes
	Rat	> 0.38 mg/l, 960 Minutes
		1.5 mg/l, 14 Minutes

SKIN CORROSION/IRRITATION	Not available
SERIOUS EYE DAMAGE/EYE IRRITATION	Not available

RESPIRATORY OR SKIN SENSITIZATION

RESPIRATORY SENSITIZATION	Not available
SKIN SENSITIZATION	Not available

GERM CELL MUTAGENICITY — Not available

CARCINOGENICITY
IARC: occupational exposures to straight-run bitumen and their emissions during road paving are "possibly carcinogenic to humans" (Group 2B). Contains polycyclic aromatic compounds (PACs). Prolonged and/or repeated skin contact with certain PACs has been shown to cause skin cancer. Prolonged and/or repeated exposures by inhalation of certain PACs may also cause cancer of the lung and of other sites of the body.

IARC MONOGRAPHS. OVERALL EVALUATION OF CARCINOGENICITY

ASPHALT (CAS 8052-42-4)	2B Possibly carcinogenic to humans.

US. OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050)

Not listed

REPRODUCTIVE TOXICITY — Not available

SPECIFIC TARGET ORGAN TOXICITY

- \- — single exposure Not available
- \- — repeated exposure Not available

ASPIRATION HAZARD — Not available

CHRONIC EFFECTS — Prolonged inhalation may be harmful.

ECOTOXICITY: Asphalt: 96 hr LL50 Oncorhynchus mykiss > 1000 mg/L, 48 hr EC50 daphnia magna 1000 mg/L, 72 hr EL50 Pseudokirchnerella subcapitata >1000 mg/L

PERSISTENCE AND DEGRADABILITY: Asphalt is not readily biodegradable.

BIOACCUMULATIVE POTENTIAL: Bioaccumulation is expected to be low.

MOBILITY IN SOIL: At ambient temperatures the semisolid nature of asphalts and negligible vapor pressure and water solubility limit their distribution with the terrestrial or aquatic compartment to which they are released.

OTHER ADVERSE EFFECTS: The constituent hydrocarbons making up asphalt are of such high molecular weight and low solubility that such substances would not be expected to cause acute or chronic toxicity to aquatic organisms.

WASTE DISPOSAL METHOD: Dispose in accordance with all local, state and federal regulations.

DOT

IATA

IMDG

UN number UN3257
UN proper shipping name Elevated temperature liquid, n.o.s. (ASPHALT)
Class 9
Transport hazard class(es) Subsidiary risk -
Packing group III
Special precautions for user Not available.

UN number UN3257
UN proper shipping name Forbidden
Class Forbidden
Transport hazard class(es) Subsidiary risk -
Packing group Not applicable.
Environmental hazards No.
Special precautions for user Not available. **Passenger and cargo aircraft** Forbidden. **Other information**
Cargo aircraft only Forbidden.

UN number UN3257
UN proper shipping name Elevated temperature liquid, n.o.s. (ASPHALT)
Class 9
Transport hazard class(es) Subsidiary risk -
Packing group III **Marine pollutant** No. **Environmental hazards EmS** Not available.

Special precautions for user Not available.
Transport in bulk according to Not available.
Annex II of MARPOL 73/78 and the IBC Code
Further information Shipping Marking: HOT. Transport by air is forbidden when shipped above 212°F (100°C).

DOT IMDG

US FEDERAL REGULATIONS

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

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not Listed

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 EXTREMELY HAZARDOUS SUBSTANCE

Not Listed

SARA 311/312
Hazardous chemical

No

SARA 313 (TRI reporting)

Not Regulated

OTHER FEDERAL REGULATIONS

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

Not Regulated

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

Not Regulated

Safe Drinking Water Act (SDWA)

Not Regulated

US STATE REGULATIONS

WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4)

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

Not Regulated

US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4)

US. Rhode Island RTK

Not Regulated

US. California Proposition 65

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990

INTERNATIONAL INVENTORIES

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

NFPA RATING

HMIS RATING

FURTHER INFORMATION

HMIS® is a registered trade and service mark of the NPCA.

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