

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** **Petroleum Pitch**  
**Chemical Name:** Petroleum pitch      **Synonyms:** None applicable  
**CAS Number:** 68187-58-6      **Product Use:** waterproofing; roofing; industrial anodes, cathodes and electrodes; specialty carbon products  
**Manufacturer Information:** Lone Star Specialties, LLC      **Emergency Phone Number (24 hr.):** (800) 424-9300 CHEMTREC  
 6412 U.S. Highway 259 South      **Non-Emergency Phone Number:** (903)656-2536  
 Lone Star, Texas USA 75668      **Non-Emergency Fax Number:** (903)656-2151

**SECTION 2: HAZARDS IDENTIFICATION**

**Emergency Overview:**

This product is a molten black viscous liquid when heated that will cause thermal burns upon skin contact. At room temperature, this product is a black glassy solid. Carcinogen. Toxic. Irritant (eye) (respiratory). Sensitizer (skin).  
**DANGER!**  
 Contact with heated material may cause severe burns.  
 Contains polynuclear aromatic hydrocarbons some of which have produced cancer in laboratory animals and humans.

**Signs and Symptoms of Potential Overexposure:**

Pitch vapors and dust are irritating to the skin, eyes and respiratory tract. Direct skin contact with pitch dust and/or high vapor concentrations may cause burning and itching, changes in pigmentation, and skin eruptions. When accentuated by sunlight, skin exposure may result in a phototoxic skin reaction.



Direct eye contact with the dust may cause inflammation, discomfort, conjunctivitis, and possible abrasion of the cornea. In general, acute oral toxicity is expected to be moderate, but ingestion is not likely to be a primary route of exposure. Symptoms of systemic poisoning after ingestion of other petroleum products include salivation, nausea, vomiting, and abdominal discomfort, respiratory difficulties, dizziness, and headache, loss of pupillary reflex, cyanosis, hypothermia, and mild convulsions. It is assumed that ingestion of pitch would produce similar symptoms. Care should be taken to ensure that exposure limits for dust are not exceeded if pitch dust is present (OSHA PEL for particulates = 15 mg/m<sup>3</sup> for total dust; 5 mg/m<sup>3</sup> for respirable fraction).

**Primary Route(s) of Entry:**

skin contact, skin absorption, eye contact, inhalation, ingestion

**Medical Conditions**

Persons with pre-existing skin disorders or central nervous functional illnesses may be at increased risk from overexposure. Exposure to vapors may aggravate pre-existing lung conditions. This is not likely to be a problem when appropriate procedures are used to minimize exposure.

**Aggravated by Exposure:**

**SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS**

Ingredient	CAS Number	Concentration (%)	Exposure Limits	
			OSHA PEL	ACGIH TLV
Petroleum Pitch	68187-58-6	100 %	0.2 mg/m <sup>3</sup> TWA (benzene soluble fraction)	0.2 mg/m <sup>3</sup> TWA (benzene soluble fraction)
The above listed complex substance contains the following constituents				
5-methylchrysene	3697-24-3	0.1-0.5		
Benzo(j)fluoranthene	205-82-3	0.1-0.25		
Benzo(a)pyrene	50-32-8	0.1-0.2		
Benzo(g,h,i)perylene	191-24-2	0.05-0.1		
Benz(a)anthracene	56-55-3	0.1-0.2		
Benzo(a)phenanthrene	218-01-9	0.1-0.2		
Sulfur Compounds	Mixture	0.5-4		

Notes: The manufacturer has voluntarily elected to reflect exposure limits contained in OSHA's 1989 air contaminants standard in its MSDS's, even though certain of those exposure limits were vacated in 1992.

**SECTION 4: FIRST AID MEASURES**

<b>Skin Contact:</b>	For contact with solid pitch, remove contaminated clothing and wash exposed area twice with waterless hand cleaner, soap and water, or a mild detergent. Do not use solvents on skin, as they may promote absorption of this material. The exposed area should be examined by medical personnel if irritation or pain persists after washing.  For contact with hot molten material, immerse or flush skin with cold water for at least 15 minutes. Call a physician. Do not attempt to remove solidified material since removal may cause further tissue injury. Cold material over a burn should not be removed except by a physician. Remove cold material (not associated with a burn) with waterless hand cleaner and then wash with soap and water.
<b>Eye Contact:</b>	Rinse eyes immediately with large amounts of water for at least 15 minutes, occasionally lifting the eyelids. GET MEDICAL ATTENTION.
<b>Inhalation:</b>	Remove from exposure area to fresh air immediately. If breathing has stopped, give artificial respiration. Keep affected person warm and at rest. Give oxygen if respiration is shallow. GET MEDICAL ATTENTION.
<b>Ingestion:</b>	If conscious, induce vomiting to prevent further absorption. Give oxygen if respiration is shallow. GET MEDICAL ATTENTION. Do not give anything by mouth to an unconscious person.
<b>Thermal Exposure:</b>	Contact with molten pitch causes serious burns. For contact with molten product, do not remove contaminated clothing. Flush skin immediately with large amounts of cold water. If possible, submerge area in cold water. Pack affected area with ice and GET MEDICAL ATTENTION immediately.
<b>Delayed Effects:</b>	none known
<b>Note to Physician:</b>	No specific antidote known. Treatment should be based on the judgment of the physician in response to the reactions of the patient.  Recommended practice is to not attempt to remove hot material associated with a burn. Allow the solidified material to remain in place until cooled so it can naturally fall off. Natural separation will occur in 48-72 hours. If removal is attempted, mineral oil may be used to remove asphalt once it is cooled. For best results, work it into the skin around the material and allow the material to "float" off.

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**SECTION 5: FIRE FIGHTING MEASURES**


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<b>Flash Point:</b>	> 500°F	<b>Method:</b>	TCC	<b>Autoignition Temperature:</b>	> 750°F (399°C)
<b>Flammable Limits:</b>	UFL :	not available		LFL:	not available
<b>NFPA rating:</b>		<b>HMIS classification:</b>			
<b>Health: 2</b>		<b>Health: 2</b>			
<b>Flammability: 1</b>		<b>Flammability: 1</b>			
<b>Reactivity: 1</b>		<b>Reactivity: 1</b>			
<b>Flammability Classification (OSHA):</b>		<b>not applicable</b>			
<b>Hazardous Products of Combustion:</b>	Toxic vapors may be released upon thermal decomposition (nitrogen oxides, carbon monoxide, carbon dioxide, sulfur dioxide, PAH's).				
<b>Potential for Dust Explosion:</b>	Fine pitch dust has a dust explosion potential similar to coal dust, with a minimum cloud ignition temperature of 710°C (1310°F). Dust explosion concentration is 0.035 ounces/cubic foot (1000 mg/0.03 m3).				
<b>Special Flammability Hazards:</b>	Liquid pitch at elevated temperatures will sustain combustion, and may generate vapors that may ignite in the presence of air and a source of ignition. Closed containers may explode when exposed to extreme heat. Solid pitch dust is sensitive to static discharge.				
<b>Appropriate Extinguishing Media:</b>	Water fog, carbon dioxide, dry chemical, foam, sand, steam. Water spray can control unconfined pitch fires, but may cause frothing or eruption in closed tanks.				
<b>Basic Fire Fighting Guidance:</b>	Wear self-contained breathing apparatus and full protective clothing. Skin and eye contact should be avoided. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources. .				

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**


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<b>Containment Techniques:</b>	If solid pitch is spilled, shovel the spilled material into disposal containers. If liquid pitch is spilled, contain the material using inert solids (i.e., sand, earth, etc.) and allow the material to solidify and cool. Cooled pitch may then be shoveled into disposal containers.
<b>Clean-up Procedures &amp; Equipment:</b>	Wear protective equipment during clean-up. Remove all ignition sources. Ventilate area of spill or leak. Collect material for later disposal. After collection of product, flush area with water.
<b>Evacuation Procedures:</b>	Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
<b>Special Instructions:</b>	Avoid dust generation or exposure to hot product during clean up. Ensure thorough decontamination of the release area and clean-up personnel.
<b>Special Reporting Requirements:</b>	Notify appropriate authorities if required by regulation.

### SECTION 7: HANDLING AND STORAGE

<b>Storage Precautions:</b>	Protect containers from physical damage, sparks and flames.
<b>Storage Recommendations:</b>	Outside or detached storage is preferable. Maintain cool, dry, ventilated conditions for storage. Containers should be periodically inspected.
<b>Precautions for Unique Hazards:</b>	This material may present a dust explosion hazard in solid form and is sensitive to ignition by electrostatic discharge. Maintain areas below flammable vapor/explosive dust concentrations.
<b>Practices to Minimize Risk:</b>	Wear appropriate protective equipment when performing maintenance on contaminated equipment. Avoid prolonged or repeated contact with skin or breathing of dust and vapors. Do not smoke or eat in areas where this material is handled. Wash hands thoroughly before eating or smoking. A complete soap and water shower should be taken at the end of each work day. Contaminated clothing should not be reworn until cleaned. Launder contaminated clothing separately from other laundry before reuse.
<b>Special Handling Equipment:</b>	Closed system handling of liquid pitch may create excessive vapor concentrations in confined spaces; i.e., tanks, rail cars, tank trailers. Follow appropriate confined space entry procedures when entering any confined space that has been in liquid pitch service.
<b>Dangerous Incompatibility Reactions:</b>	Keep away from strong oxidizing agents.
<b>Incompatibilities with Materials of Construction:</b>	none known

### SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Exposure Limits:</b>	<b>OSHA PEL:</b> 0.2 mg/m <sup>3</sup> as 8-hr TWA (Petroleum pitch volatiles)	<b>ACGIH TLV:</b> 0.2 mg/m <sup>3</sup> as 8-hr TWA (Petroleum pitch volatiles)
<b>Personal Protective Equipment:</b>	Use NIOSH-approved chemical cartridge respirator with organic vapor cartridges, or any supplied-air respirator as necessary for protection from petroleum pitch volatiles. Wear impervious gloves (i.e., latex rubber), boots, work uniform and safety glasses or chemical goggles. Application of certain protective creams for aromatic products and sunscreens (SPF of at least 15) before and during work may be beneficial in reducing the risk of overexposure.	
<b>Respirator Caution:</b>	Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.	
<b>Ventilation:</b>	All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided.	
<b>Other Engineering Controls:</b>	All appropriate engineering controls should be used to minimize exposure potential.	
<b>Thermal Hazards:</b>	When handling liquid pitch (i.e., taking samples), wear appropriate thermal protection equipment and use tongs as needed. Use of chemical goggles or face shields is highly recommended when handling molten material.	
<b>Additive or Synergistic Effects:</b>	Overexposure to this material causes photosensitization of the skin. See sunscreen recommendations above.	

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Molecular Formula:</b>	a complex hydrocarbon mixture which includes polynuclear aromatic hydrocarbons (PAH's)
<b>Molecular Weight:</b>	not available
<b>Appearance, State &amp; Odor:</b>	black liquid with strong tarry odor
<b>pH:</b>	neutral

<b>Vapor Pressure:</b>	Negligible @ 25°C
<b>Vapor Density (air = 1):</b>	> 1.0
<b>Boiling Point:</b>	> 232°C (initial)
<b>Freezing Point:</b>	Not available
<b>Melting Point:</b>	104-124 °C
<b>Solubility in Water:</b>	insoluble to slightly soluble
<b>Specific Gravity or Density:</b>	1.22 @ 15.5°C
<b>VOC Content:</b>	not available
<b>Softening Point:</b>	60°C to 140°C, depending on the specific product
<b>Bulk Density:</b>	> 10.2 lbs/gal @ 15.55 °C
<b>Octanol / Water Partition Coefficient:</b>	not available
<b>Odor Threshold:</b>	not available

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**SECTION 10: STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Conditions to Avoid:</b>	Avoid static discharge and generation of dust. Contact with water can cause frothing or eruption of closed tanks.
<b>Incompatibilities:</b>	strong oxidizers
<b>Hazardous Decomposition Products:</b>	none known
<b>Hazardous Polymerization:</b>	will not occur

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**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Acute Oral LD<sub>50</sub>:</b>	6200 mg/kg	<b>Species:</b>	rat		
<b>Acute Dermal LD<sub>50</sub>:</b>	>2000	<b>Species:</b>	rat		
<b>Acute Inhalation LC<sub>50</sub>:</b>	not available	<b>Duration:</b>	not available	<b>Species:</b>	not available
<b>Skin / Eye Irritation:</b>	Mild skin irritant / Mild eye irritant				
<b>Target Organs:</b>	Skin, possibly lungs, bladder, kidney and central nervous system.				
<b>Carcinogenicity:</b>	Petroleum pitch volatiles (Benzo(a)pyrene, benz(a)anthracene, Benzo(a)phenanthrene, Benzo (G,H,I) perylene and 5-methylchrysene), soots, tars and oils are listed as a carcinogenic category by OSHA, ACGIH, the National Toxicology Program (NTP) and the International Agency for Research on Cancer (IARC). Prolonged or repeated contact may lead to dermatitis, and with poor hygienic practices, to more serious skin disorders such as ulcerations, benign skin growths and skin cancer. Some epidemiological studies have suggested that workers exposed to petroleum pitch emissions in Soderberg aluminum manufacturing facilities may have a slightly increased risk of developing lung or bladder cancer. It is important to note, however, that the relevance of these findings to non-Soderberg facilities is currently unknown.				
<b>Teratogenicity:</b>	No data available.				
<b>Reproductive Effects:</b>	No scientific study supports an association between petroleum pitch exposures and human reproductive hazards.				
<b>Neurotoxicity:</b>	No data available.				
<b>Mutagenicity:</b>	Available data characterizes petroleum pitch as a mutagen.				
<b>Additional Toxicity Information:</b>	Overexposures may lead to photosensitization of the skin.				

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**SECTION 12: ECOLOGICAL INFORMATION**

<b>Ecotoxicity:</b>	Component Analysis - Aquatic Toxicity
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PETROLEUM PITCH (68187-58-6)

Fish:

96 Hr LC50 Brachydanio rerio: 48 mg/L [semi-static]

BENZ(A)ANTHRACENE (56-55-3)

Invertebrate:

96 Hr LC50 Daphnia magna: 0.01 mg/L [Static];

48 Hr EC50 Daphnia magna: 0.0042 mg/L

**Environmental Fate:**

If spilled, hot product and/or the coating action of the oil components could harm plant life. This product does not concentrate or accumulate in the food chain. This product is not expected to cause any acute or chronic toxicity to aquatic organisms due to extremely low water solubility.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**US EPA Waste Number:**

not applicable

**Classification of Waste as Manufactured:  
(per federal regulations)**

Non-Hazardous

NOTE: Generator is responsible for proper waste characterization. State hazardous waste regulations may differ substantially from federal regulations.

**Waste Disposal:**

Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws. Note that disposal regulations may also apply to empty containers and equipment rinsates.

**SECTION 14: TRANSPORT INFORMATION**

**Transportation**

STCC Code: 2911637; HAZ STCC Code: 4960117 ERG: 171

**US DOT Information**

Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Contains: BENZO(A)PYRENE, DIBENZO(A,H)ANTHRACENE), RQ

UN/NA #: UN3077 Hazard Class: 9 Packing Group: III

Required Label(s): Miscellaneous, 3077, Class 9

This material contains reportable quantity (RQ) Hazardous Substances. Product in Tank Car or Tank Truck is shipped as 'Elevated temperature liquid, n.o.s.'

**US DOT Reportable Quantities**

BENZO(A)PYRENE (50-32-8) 1 lb RQ; 0.454 kg RQ

DIBENZO(A,H)ANTHRACENE (53-70-3) 1 lb RQ; 0.454 kg RQ

**TDG Information**

Shipping Name: Environmentally hazardous substance, solid, n.o.s. (Contains: BENZO(A)PYRENE, DIBENZO(A,H)ANTHRACENE)

UN #: UN3077 Hazard Class: 9 Packing Group: III

Required Label(s): Miscellaneous, 3077, Class 9

**ICAO Information**

Shipping Name: Environmentally hazardous substance, solid, n.o.s. (Contains: BENZO(A)PYRENE, DIBENZO(A,H)ANTHRACENE)

UN #: UN3077 Hazard Class: 9 Packing Group: III

Required Label(s): Miscellaneous, 3077, Class 9, LTD QTY (when applicable)

Passenger & Cargo Aircraft - Ltd. Qty. - (Packing Instruction / Max. Net Qty. per Pkg.): Y956 / 30 kg G

Passenger & Cargo Aircraft (Packing Instruction / Max. Net Qty. per Pkg.): 956 / 400 kg

Cargo Aircraft Only (Packing Instruction / Max. Net Qty. per Pkg.): 956 / 400 kg

Special Provisions: A97, A158, A179

ERG Code: 9L

**IATA Information**

Shipping Name: Environmentally hazardous substance, solid, n.o.s. (Contains: BENZO(A)PYRENE, DIBENZO(A,H)ANTHRACENE)

UN #: UN3077 Hazard Class: 9 Packing Group: III

Required Label(s): Miscellaneous, 3077, Class 9, LTD QTY (when applicable)

Passenger & Cargo Aircraft - Ltd. Qty. - (Packing Instruction / Max. Net Qty. per Pkg.): Y956 / 30 kg G

Passenger & Cargo Aircraft (Packing Instruction / Max. Net Qty. per Pkg.): 956 / 400 kg

Cargo Aircraft Only (Packing Instruction / Max. Net Qty. per Pkg.): 956 / 400 kg

Special Provisions: A97, A158, A179

ERG Code: 9L

**SECTION 15: REGULATORY INFORMATION**

**OSHA Hazards:**

Carcinogen. Toxic. Irritant. Sensitizer (skin).

**Chemical Inventory Status:** **TSCA:** Yes **EINECS:** Yes **Canada:** Yes - DSL  
**Japan:** Yes **Korea:** Yes **Australia:** Yes  
**China:** Yes **Philippines:** Yes

This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), TSCA 12(b), and/or require an OSHA process safety plan.

**SARA 313:** BENZ(A)ANTHRACENE (56-55-3) SARA 313: 0.1 % Supplier notification limit  
 BENZO(A)PYRENE (50-32-8) SARA 313:0.1 % Supplier notification limit  
 DIBENZO(A,H)ANTHRACENE (53-70-3) SARA 313:0.1 % Supplier notification limit  
 BENZO(J)FLUORANTHENE (205-82-3) SARA 313:0.1 % Supplier notification limit  
 BENZO(K)FLUORANTHENE (207-08-9) SARA 313: 0.1 % Supplier notification limit

**Reportable Quantities:** Approximately 167 – 222 lbs. (17 – 22 gallons) based on content of Benzo (a)pyrene.

**SARA 311/312 Hazardous Categories (40 CFR 370 Subparts B and C)**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS#	CA	MA	MN	NJ	PA
PETROLEUM PITCH	68187-58-6	Yes <sup>1</sup>				
BENZ(A)ANTHRACENE	56-55-3	Yes	Yes	Yes	Yes	Yes
BENZO(A)PYRENE	50-32-8	Yes	Yes	Yes	Yes	Yes
DIBENZO(A,H)ANTHRACENE	53-70-3	Yes	Yes	Yes	Yes	Yes
BENZO(J)FLUORANTHENE	205-82-3	Yes	Yes	Yes	Yes	Yes
BENZO(K)FLUORANTHENE	207-08-9	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

**Canadian Regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**WHMIS Classification** D2A.

**WHMIS Ingredient Disclosure List**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

**PETROLEUM PITCH ( 68187-58-6)** 0.1 %  
**BENZ(A)ANTHRACENE (56-55-3)** 0.1 %  
**BENZO(A)PYRENE (50-32-8)** 0.1 %  
**DIBENZO(A,H)ANTHRACENE (53-70-3)** 0.1 %

**Canada Inventory Information (Product)**

One or more components of this product are not listed on either the DSL or the NDSL.

**U.S. Inventory (TSCA) Information (Product)**

All the components of this substance are listed on or are exempt from the inventory.

**Inventory Status (Components)**

Component Analysis - Inventory	CAS#	US	CA
<b>Component</b>			
PETROLEUM PITCH	68187-58-6	Yes	DSL
BENZ(A)ANTHRACENE	56-55-3	Yes	NSL
BENZO(A)PYRENE	50-32-8	Yes	DSL
DIBENZO(A,H)ANTHRACENE	53-70-3	Yes	NSL
BENZO(J)FLUORANTHENE	205-82-3	No	No
BENZO(K)FLUORANTHENE	207-08-9	No	No

**SECTION 16: OTHER INFORMATION**

References:

1. 40 CFR Part 261
2. 49 CFR Part 172
3. 29 CFR § 1910.1000
4. 40 CFR § 302.4

Created: 1985

Last Updated: 08-10-2015; 09/29/2015 added pictogram, 02/10/2016 changed product name, chemical name, and synonyms, modified CAS numbers and constituent lists to reflect coal tar free product. 1/24/2019 revised synonyms and changed product name.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Lone Star Specialty Products, LLC be liable for any claims, losses, or damages of any party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Lone Star Specialty Products, LLC has been advised of the possibility of such damages.