



Safety Data Sheet

Section 1: Product and Company Identification

Produce Name:	Hot Mix Asphalt
Synonyms:	Hot Mix Asphalt, HMA, SuperPave, Commercial Mix
Chemical Family:	Petroleum Asphalt
Company Identification:	Pace Construction Company, LLC 1620 Woodson Rd. St. Louis, MO 63119
Business Number:	314-524-7223
Emergency Number:	314-2486-4610
Web Site:	www.paceconstructionstl.com

Section 2: Hazards Identification

Symbols:



European and GHS



Canada (WHMIS)

Signal Word:

Warning

Warning:

Hot product can cause burns.

Toxic – Harmful by inhalation.

Hot product can release Hydrogen Sulfide gas;

Product contains crystalline silica.

Irritant Causes eye, skin and inhalation irritation.

Use proper engineering controls, work practices, and PPE.

Emergency Overview: Hot mix asphalt is a black colored granular solid that has a petroleum odor. Hot product will cause severe thermal burns. If burned by hot product, cool affected area immediately with cool water. Do not

attempt to remove solidified material from skin. Seek medical attention. When heated, this product may release toxic hydrogen sulfide (H₂S). Prolonged or repeated skin contact can cause drying of the skin which may produce irritation or dermatitis.

- Eye Contact:** Hot product will cause severe thermal burns. Eye contact with hot mix asphalt fumes can cause moderate eye irritation, redness, and itching. Airborne dust may cause immediate or delayed irritation or inflammation. Eye exposures require immediate first aid to prevent damage to the eye.
- Skin Contact:** Direct contact with hot mix asphalt will cause severe thermal burns. Repeated or prolonged contact to hot mix asphalt may cause dry skin, discomfort, irritation, itching and dermatitis.
- Inhalation (acute):** Hot mix asphalt releases irritating fumes or vapors such as smoke, carbon dioxide, carbon monoxide, unburned hydrocarbons. Hydrogen sulfide and other sulfur-containing gases can evolve from this product at elevated temperatures. Exposure to fumes or vapors may cause irritation of the nose and throat, and symptoms such as headache, dizziness, loss of coordination, and drowsiness. Cutting, crushing or grinding hardened asphalt will release dust. Breathing dust may cause nose, throat or lung irritation, including choking, depending on the degree of exposure.
- Inhalation (chronic):** Risk of injury depends on duration and level of exposure.
- Silicosis:** This product contains traceable amounts of crystalline silica. Under normal use and application hot mix asphalt does not release crystalline silica. However, cutting, crushing or grinding hardened asphalt or other crystalline silica-bearing materials will release breathable crystalline silica. Prolonged or repeated inhalation of breathable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease.
 - Carcinogenicity:** Hot mix asphalt is not listed as a carcinogen by IARC or NTP; however, hot mix asphalt contains traceable amounts of crystalline silica that is classified by IARC and NTP as known human carcinogen.
- Ingestion:** Do not chew or ingest hot mix asphalt. Hot product will cause thermal burns. Ingestion may result in nausea, vomiting, diarrhea and restlessness. Chewing asphalt has caused gastrointestinal effects.

Stomach obstructions have been reported in individuals who have chewed and swallowed asphalt.

Section 3: Composition / Information on Ingredients

Chemical Name	Amount	CAS Number	OSHA	ACGIH
Aggregates (sand, crushed stone, RAP, RAS)	90-96%	Mixture	15mg/m ³	15mg/m ³
Petroleum Asphalt Oil	3-7%	8052-42-4	5mg/m ³	0.5mg/m ³

MAY CONTAIN ONE OR MORE OF THE FOLLOWING

Chemical Name	Amount	CAS Number	EINECS Number
EvoFlex CA (Rejuvenator)	.25-.27 gal/mix ton	Trade Secret	Trade Secret
AD-here HP PLUS (Anti-Strip)	.03-.045 gal/mix ton	Trade Secret	Trade Secret
AD-here LOF 65-00 w/ CECABASE (Warm Mix)	.06-.075 gal/mix ton	Trade Secret	Trade Secret

General Product Information:

Trace elements: Hot mix asphalt is made from materials mined from the earth and is processed using energy provided by fuels. Trace amounts of naturally occurring, potentially harmful chemicals might be detected during chemical analysis.

Section 4: First Aid Measures

Eye Contact: Flush eye or eyes for 15 minutes with plenty of water with eye lids open. Removal of material from eyes should be done by medical assistance. Contact a physician.

Skin Contact: Flush the skin with plenty of cool water for 15 minutes. Apply iced water or cold packs to affected areas. Do not try to remove material from burn. Contact a physician.

Ingestion: Do not induce vomiting. If conscious, give the person large amount of water to drink. Contact a physician.

Inhalation: Move the person to fresh air. Seek medical attention if discomfort or breathing remains difficult.

Section 5: Fire Fighting Measures

General Hazard: Combustible solid. Avoid breathing fumes.

Extinguishing Media: Agents approved for Class B hazards

Special Fire Fighting Procedures\Equipment: Full protective gear is recommended.

Flash Point: > 200°F (93.3°C)

Lower Explosive Limit: N/A

Auto Ignition Temperature: N/A

Upper Explosive Limit: N/A

Hazardous Combustion Products: Hydrocarbons

Section 6: Accidental Release Measures

Personnel involved in cleanup should implement controls as identified in section 8 as appropriate. Keep all ignition sources at least 50 feet away. Avoid personal contact with hot material. Prevent materials from entering streams, drainage or sewers. Spills entering surface waters (or any other watercourse or sewers entering/leading to surface waters) that cause a sheen must be reported to the National Response Center 1-800-424-8802. None of the components are subject to the reporting requirement of Title III of SARA, 1986 and 40 CFR 372. Dispose of waste material according to local, state and federal regulations.

Section 7: Handling and Storage

When petroleum asphalt products are heated, potentially irritating emissions may be released. Breathable dust may be generated when hardened hot mix asphalt is subjected to mechanical forces, such as in demolition work, surface treatment and recycling of pavement. Tripping accidents have occurred because of asphalt buildup on bottoms of shoes and boots. Materials should be removed regularly to prevent such accidents. Do not store near food and beverages or smoking materials.

Section 8: Exposure Controls / Personal Protection

Eye Protection: Safety glasses with side shields should be worn.

Skin Protection: Resistant gloves should be worn to protect the hands. Long sleeve shirts and pants are recommended.

Respiratory Protection: Not required under normal working conditions. For air contamination concentrations which exceed or are likely to exceed applicable exposure limits, use a NIOSH/MSHA approved, contaminate specific air purifying respirator. If such concentrations are sufficiently high that the air purifying respirator is inadequate, or if oxygen adequate to sustain life is not present, use a positive pressure self contained breathing apparatus. Consult an industrial hygienist for

evaluation of exposures. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

Ventilation: Use local exhaust or general dilution ventilation to control exposure within applicable limits.

Hygiene: Use normal good hygiene practices. Wash hands with soap and water before eating, drinking, smoking, and using toilet facilities. Wash work clothes after each use. Clean skin with soap and water or an oil dissolving skin cleaner.

Section 9: Physical and Chemical Properties

Appearance: Course black material

Vapor Pressure: N/A

Odor: Petroleum odor

Vapor Density: N/A

Physical State: Solid

Boiling Point: > 350°F

Specific Gravity (H₂O=1): 2.2 to 2.5

Melting Point: N/A

pH (in water) (ASTM D 1293-95): N/A

Evaporation Rate: N/A

Solubility in Water: N/A

Section 10: Stability and Reactivity

Stability: Stable

Conditions to avoid: Keep away from ignition sources. Avoid contact with incompatible materials.

Hazardous Polymerization: This will not occur.

Incompatibility with other materials: Strong oxidizers may react with hydrocarbons. Adding water to hot asphalt presents an explosion hazard.

Hazardous Decomposition: Carbon monoxide, nitrogen oxide, sulfur dioxide, hydrogen sulfide, and various hydrocarbons may be released by thermal decomposition. Hazardous vapors may collect in enclosed vessels or areas if not properly ventilated.

Section 11: Toxicological Information

Route of Exposure: Inhalation, Ingestion, Skin and Eye contact

Toxicological Data: Acute and chronic overexposure to this material or its components may cause systemic toxicity, including adverse effects to the following: liver, kidney, lungs, skin, spleen, thymus, blood elements, lymph nodes, testes, bone marrow, and nervous system.

Exposure to components of this material may cause the following specific symptoms, depending in the concentration and duration of exposure: anemia, pallor, fatigue, loss of appetite, and melanosis. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately inhaling vapors may be harmful or fatal. Emissions from heated petroleum asphalt may have unpleasant odor, and may produce nausea and irritation of the upper respiratory tract. Naphtha component vapors (hot asphalt) at high concentrations in enclosed spaces may cause symptoms of euphoria, respiratory irritation and edema, headaches, dizziness, drowsiness, confusion, coma, cyanosis and generalized depression. Hydrogen sulfide causes respiratory irritation at concentrations of 4 to 100 ppm. At low concentration H₂S has a rotten egg odor. At elevated concentrations H₂S acts as a systemic poison, causing unconsciousness and death by respiratory paralysis. Chronic inhalation of petroleum asphalt emissions may contribute to respiratory irritation. If hardened hot mix asphalt is subjected to mechanical forces which generate dust particles, exposure to respirable crystalline silica dust is possible.

Carcinogenicity: Petroleum asphalt and asphalt additives in this product are not listed as a carcinogen by NTP, OSHA, or IARC. Crystalline silica, a possible component of this product, is listed by IARC but not by OSHA. IARC has determined that there is sufficient evidence for carcinogenicity to experimental animals exposed to crystalline silica and limited evidence for carcinogenicity to humans. "Limited evidence" means that a relationship is possible; however, other explanations such as chance, bias or confounding factors cannot adequately be excluded. NTP has listed crystalline silica as reasonably anticipated to be a human carcinogen.

Teratogenicity, Mutagenicity, Other Reproductive Effects: This product may contain components which may cause adverse reproductive and/or development effects.

Sensitization to Material: The possibility of allergic sensitization should be considered.

Pre-Existing Conditions Aggravated by Exposure: Existing abnormal conditions of the skin and/or respiratory system may be aggravated by exposure to asphalt fumes and by petroleum distillates. Exposure to dust from disrupted hardened asphalt

concrete may aggravate respiratory diseases or dysfunctions, and skin and eye conditions.

Section 12: Ecological Information

Ecotoxicity: This material may be toxic to fish and other aquatic life and may impede growth of vegetation.

Section 13: Disposal Considerations

Waste Disposal: Dispose of waste material according to local, state, and federal regulations.

Section 14: Transportation Information

DOT Information

Shipping Name: Hot Mix Asphalt

Additional Info: If the shipping temperature of a solid equals or exceeds 464°F, DOT regulations classify the solid as an “Elevated Temperature Material”, and a “Hot” label is required. Transport in accordance with local regulations, where applicable. Consult 49 CFR 172.101 for shipping information.

Section 15: Regulatory Information

US Federal Regulations

Status under OSHA Hazard Communication Standard, 29 CFR 1910.1200: This product does contain components that are considered a “Hazardous Chemical” under this regulation, and should be included in the employer’s hazard communication program

Reportable Quantities Under the Clean Water Act, CERCLA, and EPCRA, 40 CFR 117, 302, and 355: Released of this product may be reportable to the National Response Center (1-800-424-8802). Check with state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations.

Hazard Category and Applicability of EPCRA Hazardous Substance Inventory Reporting, 40 CFR 370: This product qualifies as a “hazardous substance” with delayed health effects.

Applicability of EPCRA Toxic Chemical Release Inventory (TRI) Reporting 40 CFR 372: This product is not subject to TRI reporting and all potentially covered constituents are present small concentrations.

Status Under the Toxic Substances Control Act, 40 CFR 710: The chemicals used in this product are in the TSCA inventory list.

Section 16: Other Information

Label Requirements:

DANGER! RELEASE OF TOXIC HYDORGEN SULFIDE (H2S) GAS CAN BE EMITTED FROM HOT ASPHALT. DUE TO ODOR MASKING/FATIGUE OF THE SENSE OF SMELL, THE ODOR OF H2S (ROTTEN EGGS) CANNOT BE RELIED UPON AS A MEANS OF DETECTION. INHALATION OF A FEW BREATHS OF HIGH CONCENTRATIONS (700PPM)COULD BE FATAL.

Hazardous Material Information System (HMIS):	Health	2
	Flammability	1
	Physical Hazard	1
	Personal Protection	B

HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: Safety glasses, gloves, heat resistant boots, long sleeve shirt and pants

Other Information:

Seller makes not Warranty, express or implied, concerning the product or the merchantability or fitness therefore for any purpose of concerning the accuracy of any information provided by Pace Construction Co., except that the product shall conform to contracted specifications. The information provided herein was believed by Pace Construction Co. to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. Buyer’s exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for nondelivery of the product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quality of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer’s claim is based on contract, breach of warranty, negligence or otherwise.

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