



## ASPHALT REPAIR PRODUCTS

---

### MATERIAL SAFETY DATA SHEET

(Complies with OSHA 29 CFR 1910.1200)

---

#### SECTION I - PRODUCT IDENTIFICATION

---

PakMix, Inc.  
618 S 223rd Street  
Suite #3  
Des Moines, WA 98198

Emergency Phone Number  
800-272-5649

Information Telephone Number:  
800-272-5649

Revision: Dec-09

#### **PakMix® Product Name**

PakMix® Asphalt Cold Patch  
PakMix® Blacktop Patch Repair  
PakMix® Blacktop Patch & Crack Filler

---

#### SECTION II - HAZARD IDENTIFICATION

---

**Route(s) of Entry:** Inhalation, Skin, Ingestion

**Carcinogenicity:** No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential for asphalts in monograph 35. They conclude that there was insufficient evidence that undiluted, air-refined asphalt were carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in Which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to product any delayed effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing mists, fumes, or vapors should be reduced to a minimum.

**Signs and Symptoms of Exposure:** Possible effects include headache, nasal, eye, skin and respiratory irritation, nausea; fatigue; drowsiness; pneumonitis; pulmonary edema & central nervous system depression. Aspiration hazard if ingested.

---

**SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

---

Hazardous Components	CAS No.	PEL(OSHA) mg/M <sup>3</sup>	TLV(ACGIH) mg/M <sup>3</sup>
Crushed Limestone	013176-65-3	5	5
Petroleum Asphalt	8052-42-4	5(2)	
Silica sand, crystalline (1)	14808-60-7	<u>10</u> %SiO <sub>2</sub> +2	0.05 (respirable)
May contain one of the following:			
Diesel fuel/Kerosene			100 (3)
Petroleum Distillates (Naphtha)	8030-30-6	100 ppm	100 ppm

(1) Silica is a natural occurring constituent in Limestone. The silica in this product is in a liquid suspension and is not expected to be in a respirable form under normal usage conditions.

(2) In 1997 the ACGH proposed lowering the exposure limit for petroleum asphalt to 0.5 mg/M<sup>3</sup>.

(3) In 1997 the SCGH proposed an exposure limit of 100 mg/M<sup>3</sup>. This agency is also proposing to list these materials as category A3 carcinogens. Category A3 carcinogens have been shown to be carcinogens to animals at relative high doses of exposure when tested in a manner which is not considered to be relevant to worker exposure.

**Other Limits:** National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration = 0.05 mg/M<sup>3</sup> (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

---

**SECTION IV - FIRST AID MEASURES**

---

**Eyes:** Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin:** Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

**Inhalation:** Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalations of large amounts of Portland cement require immediate medical attention.

**Ingestion:** Do not induce vomiting. GET MEDICAL ATTENTION PROMPTLY!

---

**SECTION V - FIRE AND EXPLOSION HAZARD DATA**

---

**Flash Point (Method Used):** 150°F Minimum (Pensky-Martin Closed Cup Method - ASTM D93)

**Flammable Limits:** LEL: 0.05 VEL: 5

**Extinguishing Media:** Water spray, Dry chemical, Foam or Carbon dioxide. Water or foam may cause frothing.

**Special Fire Fighting Procedures:** Self-contained breathing apparatus required for enclosed areas. Avoid breathing vapors for long periods.

**Unusual Fire and Explosion Hazards:** Do not store with strong oxidants. Storage at elevated temperatures may cause release of flammable vapors in open air or explosive vapors in confined spaces. Can cause the creation of carbon monoxide, carbon dioxide, and hydrocarbons.

---

## SECTION VI - ACCIDENTAL RELEASE MEASURES

---

If spilled, remove from bodies of water. Shovel into containers for reuse or disposal in accordance with local, state and federal guidelines. Recover and recycle as much as possible.

---

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

---

Do not store with strong oxidizers. Store as OSHA Class IIA Combustible material. Store away from heat sources and open flames.

---

## SECTION VIII - EXPLOSIVE CONTROL MEASURES

---

**Engineering Controls:** Local exhaust with a minimum face velocity of 60 fpm.

**Personal Protection:** Use of NIOSH/MSHA approved hydrocarbon vapor or supplied respiratory protection required in confined spaces. Use impervious gloves to avoid skin contact. Use splash goggles and face shields when eye/face contact may occur.

**Precautions:** Do not use solvents or abrasive cleaners to wash exposed skin.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

---

## SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

---

**Appearance and Odor:** Black semi-solid material with a hydrocarbon odor.

**Boiling Point:** (1) 105-338°F (40-170°C)

**Vapor Density:** >4

**Specific Gravity:** Approximately 2.25

**Evaporation Rate:** (1) >0.1

**Vapor Pressure:** (1) 10-200 mm Hg @ 68°F(20°C)

**Solubility in Water:** Negligible

**Melting Point:** (1) 100-135°F (38-57°C)

(1) Properties of asphalt binder portion of the product.

---

## SECTION X - REACTIVITY DATA

---

**Stability:** Stable

**Incompatibility (Materials to Avoid):** Strong oxidizers like liquid oxygen, sodium or calcium hypochlorite.

**Hazardous Decomposition or Byproducts:** Incomplete combustion can yield carbon monoxide, and oxides of sulfur and nitrogen and various hydrocarbons.

**Hazardous Polymerization:** Will not occur.

---

## SECTION XI - TOXICOLOGICAL INFORMATION

---

**Route of Entry:** Inhalation, ingestion.

**Toxicity to Animals:** LD50 : Not available

LC50: Not available

**Chronic Effects on Humans:** Conditions aggravated by exposure include eye disease, skin disorders and Chronic Respiratory conditions.

**Special Remarks on Toxicity:** Not available

---

## SECTION XII - ECOLOGICAL INFORMATION

---

**Ecotoxicity:** Not available

**BOD5 and COD:** Not available

**Products of Biodegradation:** Not available

**Toxicity of the Products of Biodegradation:** Not available

**Special Remarks on the Products of Biodegradation:** Not available

---

### SECTION XIII - DISPOSAL CONSIDERATIONS

---

**Waste Disposal Method:** Dispose of unusable material via licensed waste disposal company in accordance with local, state and federal guidelines.

---

### SECTION XIV - TRANSPORTATION INFORMATION

---

**DOT/UN Shipping name:** Non-regulated  
**DOT Hazard Class:** Non-regulated  
**Shipping Name:** Non-regulated  
Non-Hazardous under U.S. DOT and TDG Regulations

---

### SECTION XV - OTHER REGULATORY INFORMATION

---

**US OSHA 29CFR 1910.1200:** Considered hazardous under this regulation and should be included in the employers hazard communication program.  
**SARA (Title III) Sections 311 & 312:** Not determined  
**SARA (Title III) Section 313:** Not subject to reporting requirements  
**TSCA (May 1997):** All components are on the TSCA inventory list  
**Federal Hazardous Substances Act:** Is a hazardous substance subject to statues promulgated under the subject act.  
**Canadian Environmental Protection Act:** Not listed  
**Canadian WHMIS:** Considered to be a hazardous material under Hazardous Products Act as defined by the Controlled Products Regulations and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This product has been classified according to the hazard criteria of the Controlled Products Regulation (CPR). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

---

### SECTION XVI - OTHER INFORMATION

---

**Abbreviations:**

<b>ACGIH</b>	American Conference of Government Industrial Hygienists
<b>CAS</b>	Chemical Abstract Service
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation & Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>CPR</b>	Controlled Products Regulations (Canada)
<b>DOT</b>	Department of Transportation
<b>IARC</b>	International Agency for Research
<b>MSHA</b>	Mine Safety and Health Administration
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicity Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>TLV</b>	Threshold Limit Value
<b>TWA</b>	Time-weighted Average
<b>WHMIS</b>	Workplace Hazardous Material Information System

---

NOTE: The information and recommendations contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. PakMix Inc. Assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.

---