QUIKRETE®
CEMENT & CONCRETE PRODUCTS™

Asphalt Repair Products

MATERIAL SAFETY DATA SHEET
(Complies with OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

The QUIKRETE® Companies
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Emergency Telephone Number
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Information Telephone Number
(770) 216-9580

MSDS N3
Revision: Feb-07

QUIKRETE® Product Name	Code #
BLACKTOP PATCH	1701-50
PERMANENT BLACKTOP REPAIR	1701-62

PRODUCT USE: COLD-PATCH REPAIR MATERIAL FOR ASPHALT

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 (IRAC) reviewed the carcinogenic potential or asphalts in monograph 35. They conclude that there was insufficient evidence that undiluted, air-refined asphalt was 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 produce any delayed effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of 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^3	TLV (ACGIH) mg/M^3

Crushed Limestone	01317-65-3	5	5
Petroleum Asphalt	8052-42-4	5 (2)	
Silica sand, crystalline (1)	14808-60-7	10 / %SiO_2+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^3.
(3) In 1997 the ACGH proposed an exposure limit of 100 mg/M^3. This agency is also proposing to list these materials as category A3 carcinogens. Category A3 carcinogens have been shown to be carcinogenic to animals at relatively 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^3 (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^oF 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 IIIA Combustible material. Store away from heat sources and open flames.

SECTION VIII – EXPOSURE CONTROL MEASURES

Engineering Controls: Local exhaust with a minimum face velocity of 60 fpm
Personal Protection: Use of a 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)
Specific Gravity: Approximately 2.25
Vapor Pressure: (1) 10-200 mm Hg @ 68 F (20 C)
Melting Point: (1) 100-135 F (38-57 C)
Vapor Density: >4
Evaporation Rate: (1) >0.1
Solubility in Water: Negligible
(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

Routes 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 – TRANSPORT 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 the 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

HMIS-III: Health – 0 = No significant health risk
1 = Irritation or minor reversible injury possible
2 = Temporary or minor injury possible
3 = Major injury possible unless prompt action is taken
4 = Life threatening, major or permanent damage possible
Flammability- 0 = Material will not burn
1 = Material must be preheated before ignition will occur

	2 = Material must be exposed to high temperatures before ignition
	3 = Material capable of ignition under normal temperatures
	4 = Flammable gases or very volatile liquids; may ignite spontaneously
Physical Hazard-	0 = Material is normally stable, even under fire conditions
	1 = Material normally stable but may become unstable at high temps
	2 = Materials that are unstable and may undergo react at room temp
	3 = Materials that may form explosive mixtures with water
	4 = Materials that are readily capable of explosive water reaction

Abbreviations:

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

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NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.
