Vulcan Materials Company

MATERIAL SAFETY DATA SHEET

Effective Date: 05/01/2012
05/31/2009

Recycled Asphalt Product (RAP)

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:
Recycled Asphalt Product (RAP)

Formula:
Mixture

Synonyms/Common Names:
Recrushed Asphaltic Concrete, Recycled Base (Crushed Misc. Base), Rap Cap Agg

Manufacturer/Contact Info:
Vulcan Materials Company and its subsidiaries and affiliates
1200 Urban Center Drive
Birmingham, AL 35242

General Phone Number:
1.866.401.5424

Emergency Phone Number:
1.866.401.5424 (3E Company, 24 hours/day, 7 days/week)

SECTION 2. COMPOSITION INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	% by Weight
Aggregate (crushed stone, sand, gravel)*	Mixture	60-90
*Composition varies naturally-typically contains quartz (crystalline silica)	14808-60-7	>1
Asphalt Cement	8052-42-4	10-40
Reclaimed Product may contain contaminants such as heavy metals, hydrocarbons and various asphalt additives.	-----	-----

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING
Dust may irritate the eyes, skin and respiratory tract. Contains or may release hydrogen sulfide gas (H_2S) when heated, which may accumulate in confined spaces. H_2S fumes and vapors may be harmful or fatal if inhaled. Avoid breathing excessive dust. Breathing silica-containing dust for prolonged periods in the workplace can cause lung damage and a lung disease called silicosis. Several scientific organizations have classified crystalline silica as causing lung cancer in humans. Silicosis and lung cancer can result in permanent injury or death.

POTENTIAL HEALTH EFFECTS

Note: RAP is a recycled product and thus may contain trace amounts of heavy metals or other contaminants depending upon its previous use. This product is a solid, reducing the potential for fume exposure. If it is further subjected to mechanical forces (such as demolition or asphalt recycling work), dust particles will be generated. If heated, asphalt fumes may be generated.

Primary Routes of Exposure:
Eyes, skin, inhalation.

Eye Contact:
Dust particles can scratch the eye causing tearing, redness, a stinging or burning sensation or swelling of the eyes with blurred vision.

Skin Contact:
Dust particles can scratch and irritate the skin with redness, an itching or burning sensation, swelling of the skin and/or rash.

Skin Absorption:
Not expected to be a significant exposure route.

Inhalation:
Dusts may irritate the nose, throat and respiratory tract by mechanical abrasion. Coughing, sneezing and shortness of breath may occur. Emissions from heated material may have an unpleasant odor, produce nausea, headache, dizziness, and irritate the mucous membranes and upper respiratory tract. Toxic hydrogen sulfide may be released when heated. Unconsciousness and asphyxiation may occur in poorly-ventilated or confined spaces. See Section 11 for additional information.

Note: Because this product is not heated under normal use and working conditions, exposure to asphalt emissions (fumes, vapors, or mists) are expected to be minimal. Potential increases if product comes in contact with heated surfaces or is heated.

Ingestion:
Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation including nausea, vomiting, diarrhea and blockage.

POTENTIAL HEALTH EFFECTS

Effects Following Prolonged or Repeated Exposure:

Exposure to high levels of respirable crystalline silica is associated with silicosis, lung cancer, and autoimmune disorders. Prolonged or repeated exposure to asphalt may cause skin disorders and effects on the lung. See Section 11 for additional information.

Carcinogenicity:

Crystalline silica-quartz, a component of this product, has been listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). See Section 11 for additional information.

Signs and Symptoms of Exposure:

Symptoms of silicosis may include (but are not limited to): shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Prolonged and repeated exposure may cause skin disorders such as dermatitis (reddening, itching, cracking, inflammation), folliculitis, and acne-like lesions, bronchitis, pneumonitis (inflammation of the lungs), reduced appetite, and abnormal fatigue.

Medical Conditions Aggravated by Exposure:

Pre-existing medical conditions that may be aggravated by exposure include disorders of the eye, skin and/or lung (including asthma and/or other breathing disorders).

SECTION 4. FIRST AID MEASURES

Eyes:

Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelid(s) open. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops. Thermal burns require immediate medical attention.

Skin:

Hot Material: Remove contaminated clothing, if possible, and immediately flush skin in cool water for at least 15 minutes. Iced water or cold packs may be applied to burned area. Do not attempt to remove material from a burn. Get immediate medical attention. Cold Material: Clean exposed skin with soap or mild detergent and large amounts of water until all material is removed from the skin. Do not use solvents or thinners to remove material from skin.

Inhalation:

Remove person to fresh air. If lung irritation persists or later develops, contact a physician. If not breathing, initiate rescue breathing, give oxygen by trained personnel and get immediate medical attention. Do not attempt to rescue victim from confined spaces without adequate protective equipment.

Ingestion:

If swallowed, do not induce vomiting. Drink a large volume of water and get immediate medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration.

Notes to Physician:

In general, emesis induction is unnecessary in high viscosity, low volatility products. Inhalation exposure of hydrogen sulfide may result in pulmonary congestion. Patients may be predisposed to pneumonia during convalescence, and should be kept under observation. Contact a Poison Center for additional treatment information.

For emergencies, contact 3E Company at 1-866-401-5424 (24 hours/day, 7 days/week).

SECTION 5. FIREFIGHTING MEASURES

Flash Point (Method Used):

Product: Not determined.
Asphalt: 400˚F (min). COC

Flammable Limits:

LEL: Not applicable **UEL:** Not applicable

Autoignition Temperature:

Not available

Extinguishing Media:

Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, halogenated agents, foam, and steam) and water fog. Avoid use of straight-stream water. Use water spray to keep fire-exposed containers cool. Adding water to hot asphalt presents an explosion hazard.

Special Firefighting Procedures:

None.

Unusual Fire and Explosion Hazards:

Fumes/vapors can explode when concentrated in an enclosed environment and supplied with an ignition source. Never weld or use a cutting torch or open flame on a full or partially full or empty bin, hopper or other container that holds or held asphaltic material unless precautions are taken to prevent explosion.

WARNING: Hydrogen sulfide (H_2S) and other hazardous gases/vapors may evolve and collect in the headspace of storage tanks or other enclosed vessels, and can create an explosive, toxic, or oxygen deficient atmosphere. H_2S gas is extremely flammable and can explode if an ignition source is provided. See Sections 3 and 11 for health effects of H_2S gas.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Precautions if Material is Spilled or Released:

Ventilate area and avoid emission inhalation or skin contact by using appropriate precautions outlined in this MSDS (see Section 8). Keep all sources of ignition at least 50 feet away. Prevent materials from entering streams, drainages, or sewers. Spills entering surface waters or sewers entering/leading to surface waters must be reported to the National Response Center 1-800-424-8802. Based on volume and use, components of this product may be subject to reporting requirements of Title III of SARA, 1986, and 40 CFR 372.

For emergencies, contact 3E Company at 1-866-401-5424 (24 hours/day, 7 days/week).

Waste Disposal Methods:

Contact the asphalt plant to determine feasibility of recycling material. Dispose of waste materials in accordance with applicable federal, state and local laws and regulations.

Environmental Precautions:

Stop leak and contain spilled material with sand, aggregate fines, or other inert adsorbent. Collect adsorbed product and clean up materials in appropriate container for proper disposal. Notify proper authorities.

SECTION 7. HANDLING AND STORAGE

Storage:

Store away from all ignition sources and open flames in accordance with applicable laws and regulations. Do not store near food and beverages or smoking materials. Respirable crystalline silica-containing dust may be generated when hardened asphalt concrete is subjected to mechanical forces, such as demolition work, surface treatment (sanding, grooving, chiseling, etc.), and recycling of pavement.

Handling:

Follow personal protection and protective controls set forth in Section 8 of this MSDS when handling this product. If personnel must enter a tank or other confined space that contained this material, follow the OSHA Confined Space Entry Program as specified in 29 CFR 1910.146. Do not store near food, beverages or smoking materials. Avoid personal contact with heated material. Respirable crystalline silica-containing dust may be generated when hardened asphalt concrete is subjected to mechanical forces, such as demolition work, surface treatment (sanding, grooving, chiseling, etc.), and/or recycling of pavement.

Do not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition as they may explode and cause injury or death.

Tripping accidents have occurred because of asphalt buildup on bottoms of shoes and boots; buildup should be removed regularly to prevent such accidents. Do not use solvents or thinners to clean footwear.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Legend:
NE = Not Established; PEL = Permissible Exposure Limit; TLV = Threshold Limit Value; REL = Recommended Exposure Limit; OSHA = Occupational Safety and Health Administration; MSHA = Mine Safety and Health Administration; NIOSH = National Institute for Occupational Safety and Health; ACGIH = American Conference of Governmental Industrial Hygienists

Component	OSHA/MSHA PEL	ACGIH TLV	NIOSH REL
Asphalt Fumes	NE	0.5 mg/m³ (as benzene-soluble aerosol)	REL-Ceiling 5 ppm
Other Particulates	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)	NE	NE
Respirable dust containing silica	10 mg/m³ ÷ (% silica + 2)	Use Respirable Silica TLV	Use Respirable Silica TLV
Total dust containing silica	OSHA: 30 mg/m³ ÷ (% silica + 2) MSHA: 30 mg/m³ ÷ (% silica + 3)	NE	NE
Respirable Crystalline Silica (quartz)	NE - Use respirable dust containing silica PEL	0.025 mg/m³	0.05 mg/m³
Respirable Tridymite and Cristobalite (other forms of crystalline silica)	½ of OSHA and MSHA respirable dust containing silica PEL	0.025 mg/m³	0.05 mg/m³
Ammonia (NH_3)	PEL 50 ppm	TLV 25 ppm TLV-STEL 35 ppm	REL 25 ppm REL-Ceiling 35 ppm
Carbon Monoxide (CO)	PEL 50 ppm	25 ppm	REL 35 ppm REL-Ceiling 200 ppm
Hydrogen Sulfide (H_2S)	PEL-Ceiling 20 ppm	TLV 10 ppm TLV-STEL 15 ppm	REL-Ceiling 10 ppm

Legend:
NE = Not Established; PEL = Permissible Exposure Limit; TLV = Threshold Limit Value; REL = Recommended Exposure Limit; OSHA = Occupational Safety and Health Administration; MSHA = Mine Safety and Health Administration; NIOSH = National Institute for Occupational Safety and Health; ACGIH = American Conference of Governmental Industrial Hygienists

Component	OSHA/MSHA PEL	ACGIH TLV	NIOSH REL
Nitrogen Dioxide (NO_2)	PEL-Ceiling 5 ppm	TLV 3 ppm TLV-STEL 5 ppm	REL-STEL 1 ppm
Ozone (O_3)	PEL 0.1 ppm	0.05 ppm	REL-Ceiling 0.1 ppm
Sulfur Dioxide (SO_2)	PEL 5 ppm	TLV 2 ppm TLV-STEL 5 ppm	REL 2 ppm REL-STEL 5 ppm

Eye Protection:

Use a full-face shield and chemical safety goggles if handling heated material. Safety glasses with side shields should be worn as minimum protection at ambient temperatures. Contact lens should not be worn when eye contact with product is possible.

Skin Protection (Protective Gloves/Clothing):

Avoid skin contact with material by wearing impervious gloves and protective clothing. With product at ambient temperatures, use disposable nitrile, neoprene or butyl rubber material. When handling hot material, use heat-resistant gloves. Use insulated, heat-resistant clothing as necessary.

Respiratory Protection:

Not expected to be necessary under normal use and working conditions. All respirators must be NIOSH-approved for the exposure levels present. (See NIOSH Respirator Selection Guide). The need for respiratory protection should be evaluated by a qualified safety and health professional. For air-contaminant concentrations which exceed or are likely to exceed applicable exposure limits, use a NIOSH-approved, contaminant-specific, air-purifying respirator. If such conditions 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. Activities that generate dust require the use of an appropriate dust respirator where dust levels exceed or are likely to exceed allowable exposure limits. For respirable silica levels that exceed or are likely to exceed an 8-hour Time Weighted Average (TWA) of 0.5 mg/m_3, a high-efficiency particulate filter respirator must be worn at a minimum; however, if respirable silica levels exceed or are likely to exceed an 8-hour TWA of 5.0 mg/m_3 a positive-pressure, full-face respirator or equivalent is required. Respirator use must comply with applicable MSHA (42 CFR 84) or OSHA (29 CFR 1910.134) standards, which include provisions for a user training program, respirator inspection, repair and cleaning, respirator fit testing, medical surveillance and other requirements.

Engineering Controls:

General dilution or local exhaust ventilation as required to maintain exposures below appropriate exposure limits. Use only in well-ventilated areas. Activities with dried/hardened product that generate dust require the use of general ventilation, local exhaust and/or wet suppression methods to maintain exposures below appropriate exposure limits.

Other:

Workers should station themselves on the upwind side of asphalt emissions when possible. It is recommended that asphalt emissions be monitored regularly to determine exposure levels. Respirable dust and quartz levels should be monitored regularly to determine worker exposure levels. Exposure levels in excess of appropriate exposure limits must be reduced by all feasible engineering controls, including (but not limited to), ventilation, process enclosure, and/or enclosed employee workstations.

Wash hands before eating, drinking, smoking, and/or using toilet facilities. A clean water supply for emergency first aid and washing facilities should be readily available. Do not use solvents or thinners to remove material from skin. Laundering clothing between uses is recommended.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Not available	**pH:** Not applicable	**Specific Gravity (H_2O = 1):** 1.0 - 1.1 @ 60˚F
Evaporation Rate (Butyl Acetate = 1): Not available	**Melting Point:** Not available	**Vapor Pressure (mm Hg.):** Not available
Solubility in Water: Not available	**Vapor Density (Air = 1):** >1	**% Volatile:** <1

Appearance and Odor:

Angular particles, light salt and pepper colored ranging in size from 1½ inch down to 200 mesh.

SECTION 10. STABILITY AND REACTIVITY

Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Keep away from direct flame/ignition sources. Contact with incompatible materials should be avoided (see below). See Sections 5, 6 and 7 for additional information.

Incompatibility (Materials to Avoid):

Strong oxidizers may react with hydrocarbons. Contact with fluorine may cause burning or explosion. Adding water to hot asphalt presents an explosion hazard.

Hazardous Decomposition or Byproducts:
Carbon monoxide and other compounds (such as amines, ammonia, nitrogen dioxide, sulfur dioxide, ozone, hydrogen sulfide, and various hydrocarbons) may be released by thermal decomposition. Hazardous vapors can collect in enclosed vessels or areas if not properly ventilated. If hydrogen sulfide is present, the flammable limits range from 4.3 to 45.5% by volume and its presence may promote the formation of pyrophoric (spontaneously igniting) iron compounds (See 29 CFR 1910.146). Silica-containing respirable dust particles can be generated. When heated, quartz is slowly transformed into tridymite (above 860˚C/1580˚F) and cristobalite (above 1470˚C/2678˚F). Both tridymite and cristobalite are other forms of crystalline silica and are considered more fibrogenic to the lungs than quartz.

Hazardous Polymerization:
Not known to occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Effects:
No specific data on this product. Asphalt has oral LD50 (rats) >5g/kg.

Petroleum-derived asphalt products should not be confused with "tar" products, which are produced from the destructive distillation of coal. The hydrocarbons in petroleum asphalt area complex mixture of paraffinic, naphthenic, and aromatic hydrocarbons, including polycyclic aromatic compounds.

If heated, some bitumens and asphalt can release small quantities of hydrogen sulfide (H_2S) gas. Do not depend upon sense of smell for warning of overexposure, since the gas causes rapid olfactory fatigue, which deadens the sense of smell at levels as low as 50ppm. Exposure to H_2S concentrations above the permissible exposure limit causes irritation of the mucous membranes, headache, dizziness, vomiting, coughing, nasal discharge and pulmonary edema. At levels between 500 and 700 ppm, respiratory paralysis, loss of consciousness and possibly death can occur within 30 to 60 minutes. Exposure to higher concentrations can result in immediate death.

Effects Following Prolonged or Repeated Exposure:
Prolonged overexposure to respirable dusts in excess of appropriate exposure limits can cause inflammation of the lung leading to possible fibrotic changes, a medical condition known as pneumoconiosis.

Prolonged and repeated inhalation of respirable crystalline silica-containing dust in excess of allowable exposure limits may cause a chronic form of silicosis, an incurable lung disease that may result in permanent lung damage or death. Chronic silicosis generally occurs after 10 years or more of overexposure; a more accelerated type of silicosis may occur between 5 and 10 years of higher levels of exposure. In early stages of silicosis, not all individuals will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposure has ceased. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

Repeated overexposures to very high levels of respirable crystalline silica (quartz, cristobalite, tridymite) for periods as short as six months may cause acute silicosis. Acute silicosis is a rapidly progressive, incurable lung disease that is typically fatal. Symptoms include, but are not limited to, shortness of breath, cough, fever, weight loss, and chest pain.

Respirable dust containing newly broken silica particles has been shown to be more hazardous to animals in laboratory tests than respirable dust containing older silica particles of similar size. Respirable silica particles which had aged for sixty days or more showed less lung injury in animals than equal exposures of respirable dust containing newly broken particles of silica.

There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effects.

IF PRODUCT IS HEATED

Repeated exposure to low levels of H_2S may cause eye effects including conjunctivitis and corneal injury. There is no evidence that H_2S will accumulate in the body tissue.

Prolonged and repeated exposure to asphalt may cause skin disorders such as dermatitis, folliculitis, and acne-like lesions, or more rarely, pigmentation of the skin. Chronic inhalation of high concentrations of asphalt emissions may cause chronic bronchitis and pneumonitis (inflammation of the lungs). In mice, there was damage to the lungs, including bronchitis, pneumonitis, and abscess formation. Guinea pigs and rats showed pneumonitis, peribronchial adenomatosis, and some squamous cell metaplasia.

Carcinogenicity:
Epidemiology studies on the association between crystalline silica exposure and lung cancer have had both positive and negative results. There is some speculation that the source and type of crystalline silica may play a role. Studies of persons with silicosis indicate an increased risk of developing lung cancer, a risk that increases with the level and duration of exposure. It is not clear whether lung cancer develops in non-silicotic patients. Several studies of silicotics do not account for lung cancer confounders, especially smoking, which have been shown to increase the risk of developing lung disorders, including emphysema and lung cancer.

In October 1996, an IARC Working Group designated respirable crystalline silica as carcinogenic (Group 1). The NTP's Report on Carcinogens, 9th edition, lists respirable crystalline silica as a "known human carcinogen." In the year 2000, the American Conference of Governmental Industrial Hygienists (ACGIH) listed respirable crystalline silica (quartz) as a suspected human carcinogen (A-2). These classifications are based on sufficient evidence of carcinogenicity in certain experimental animals and on selected epidemiological studies of workers exposed to crystalline silica.

Skin application of asphalt fume condensate fractions caused skin tumors in laboratory mice. When asphalt was dissolved or mixed with a solvent prior to exposing laboratory animals, the carcinogenicity results were weakly positive. The causal agent is thought to be 4 to 6 ring polycyclic aromatic compounds (PAH). Trace amounts of these materials may be present in asphalts and can be generated upon excessive heating. Some PAHs have been identified as causing carcinogenic and reproductive effects. Currently, epidemiological evidence does not support a link between asphalt exposure and human skin cancer.

Repeated breathing of asphalt emissions has not resulted in a carcinogenic response in laboratory animal testing. Although epidemiological studies on asphalt workers have suggested a possible link between asphalt fumes and certain types of cancer, confounding factors such as smoking and concomitant exposure to other agents in the workplace may have influenced the results of these studies. Asphalt is not listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). In 1985, the International Agency for Research on Cancer (IARC) determined that there is inadequate evidence that asphalt alone is carcinogenic to humans. However, IARC states that there is sufficient evidence that extracts (asphalts dissolved in hydrocarbon solvents) are carcinogenic to laboratory animals. Although epidemiological studies on some petroleum products containing polycyclic aromatics suggest the possibility of skin cancer induction in humans, a link between petroleum asphalt exposure and human skin cancer has not been established.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicological Data:

No specific data on this product. The asphalt component may cause damage to aquatic organisms.

Environmental Fate Data:

Significant migration into the environment and bioaccumulation are unlikely. Expected to be resistant to biodegradation.

Other:

No specific data on this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Place contaminated materials in appropriate containers and dispose of in a manner consistent with applicable federal, state, and local regulations. Prevent from entering drainage, sewer systems, and unintended bodies of water. It is the responsibility of the user to determine, at the time of disposal, whether product meets criteria for hazardous waste. Product uses, transformations, mixture and processes, may render the resulting material hazardous.

SECTION 14. TRANSPORT INFORMATION [Note: Not intended to be all-inclusive.]

DOT Proper Shipping Name:	**DOT Hazard Classification:**
Not regulated.	Not applicable.
UN/NA Number:	**DOT Packing Group:**
Not regulated.	Not applicable.

Labeling Requirements:

If the shipping temperature of a solid equals or exceeds 464˚F, DOT regulation classifies the solid as an "Elevated Temperature Material", and a "HOT" label is required. Label as required by the OSHA Hazard Communication standard [29 CFR 1910.1200(f)], and applicable state and local regulations.

SECTION 15. REGULATORY INFORMATION [Note: Not intended to be all-inclusive.]

Toxic Substances Control Act (TSCA):

The components in this product are listed on the TSCA Inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Releases of this material to water may be reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act. It is recommended that you contact state and local authorities to determine if there are any local reporting requirements in the event of a spill.

Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III:

Section 302 extremely hazardous substances:

None

Section 311/312 hazard categories:

Immediate Health

Delayed Health

Section 313 reportable ingredients at or above de minimus concentrations:

None

California Proposition 65:

WARNING: THIS PRODUCT CONTAINS CHEMICALS (CRYSTALLINE SILICA, BITUMENS, VARIOUS AROMATIC HYDROCARBONS) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

State Regulatory Lists:

The following materials/components are specifically listed by individual states. For details on regulatory requirements, you should contact the appropriate agency in your state:

Chemical Name	State
Crystalline silica (quartz)	CA; FL; MA; MN; NJ; PA

SECTION 16. OTHER INFORMATION

Disclaimer

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

Vulcan Materials Company and its subsidiaries and affiliates ("Vulcan") believe the information contained herein is accurate; however, Vulcan makes no guarantees with respect to such accuracy and assumes no liability whatsoever in connection with the use of any information contained herein by any party. The provision of the information contained herein is not intended to be, and should not be construed as, legal advice or as ensuring compliance with any federal, state, or local laws, rules or regulations. Any party using any information contained herein should review all applicable laws, rules and regulations prior to use.

Vulcan Materials Company and its subsidiaries and affiliates
1200 Urban Center Drive
Birmingham, AL 35242

MSDS 3239-045

Vulcan
Materials Company

Dear Customer/Contractor:

Please find attached a material safety data sheet (MSDS) for the product that you purchased from Vulcan Materials Company or one of its subsidiaries or affiliates ("Vulcan"). This is a revised MSDS and replaces any previous versions of the MSDS for this product. This MSDS is provided to you as required by the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Mine Safety and Health Administration's (MSHA) Hazard Communication Standard (30 CFR Part 47), and/or any applicable state Right-to-Know laws.

It is the responsibility of your company to communicate this information to your employees, customers, and contractors who may use or come in contact with this product. Further, if you distribute this product, Vulcan requests, and applicable laws may require, that you forward this MSDS to your customers.

Please direct this information to the person responsible for safety and health compliance at your company. If you have questions about the MSDS, please contact Vulcan at 1200 Urban Center Drive, Birmingham, AL 35242 or 1-866-401-5424.

If you need additional copies of this or any other Vulcan MSDS or a Spanish language version, you can obtain them at www.vulcanmaterials.com or by calling 1-866-401-5424.

La MSDS puede obtenerse en www.vulcanmaterials.com o llamando al 1-866-401-5424.

Sincerely,

Chad E. McDougal, CIH, CSP

Manager, Occupational Health