

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Cold Mix Asphalt
Synonyms: Road Patch, Blacktop Asphalt, "Cut-Back"
CAS Number: Blend

Company Identification

Reed & Graham, Inc.
690 Sunol Street
San Jose, CA 95126 USA
(408) 287-1400 (For product information)
1-800-424-9300 CHEMTREC (for emergencies)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

Chemical Name	Amount	CAS Number
ASPHALT (PETROLEUM)	3.0 - 7.0 %	8052-42-4
QUARTZ (SIO ₂)	0.0 - 90.0 %	14808-60-7
HYDROGEN SULFIDE (H ₂ S)	< 0.1 %	7783-06-4
SILICON DIOXIDE (AMORPHOUS)	0.0 - 90.0 %	7631-86-9
LIMESTONE	0.0 - 60.0 %	1317-65-3
MAGNESIUM CARBONATE	0.0 - 30.0 %	546-93-0
MICA	0.0 - 10.0 %	12001-26-2
FELDSPAR-GROUP MINERALS	0.0 - 10.0 %	68476-25-5
IRON OXIDE	0.0 - 10.0 %	1309-37-1
GAS OIL	0.0 - 6.0 %	64741-44-2

(See Section 8 for exposure guidelines); (See Section 15 for regulatory information)

COMPOSITION COMMENT:

Concentration values are typical and may vary.

Hydrogen sulfide may be present as a by-product of asphalt processing.

HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains materials that are acute hazards.

MISCELLANEOUS:

This material does not have established exposure limits.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	HMIS Rating	NFPA Rating
For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. Fumes from heated material may be irritating to eyes and respiratory tract.	Health: 1 Flammability: 0 Reactivity: 0 Personal Protection Index: 1	Health: 1 Flammability: 0 Reactivity: 0

EYE:

Fumes may cause eye irritation. Contact with hot product may produce severe burns to eye.

SKIN:

Contact with product at elevated temperatures can result in thermal burns. Frequent or prolonged contact with cool material may irritate the skin and cause a skin rash (dermatitis).

INHALATION:

Prolonged or excessive inhalation of fumes from hot material may cause respiratory tract irritation, dizziness, and nausea.

Hydrogen sulfide can cause respiratory paralysis and death depending on the concentration and duration of exposure.

INGESTION:

Ingestion is not considered a potential route of exposure. Ingestion of large amounts of cold product may cause intestinal distress. Essentially non-toxic.

SIGNS AND SYMPTOMS OF EXPOSURE:

Exposure to hot material may cause thermal burns. Vapors from hot material may have an offensive odor which may cause headaches, nausea, and vomiting. Symptoms of overexposure include: fatigue, tearing of eyes, burning sensation in the throat, cough, chest discomfort and skin irritation.

CHRONIC EFFECTS:

No known hazards in normal industrial use.

CARCINOGENICITY INFORMATION:

IARC has determined that there is inadequate evidence that asphalts are carcinogenic to humans. While brief or intermittent skin contact with this product is not expected to cause harm, those workers who do not practice good personal hygiene and who are exposed repeatedly via skin contact may be at risk.

Suspect cancer hazard (contains material which) may cause cancer: IARC has classified crystalline silica as a known human carcinogen. Procedures such as saw cutting or grinding which expose uncoated aggregate may produce significant exposure to crystalline silica.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Disorders of the kidney, liver, skin and respiratory system.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

Burns due to contact with heated material require immediate medical attention. Hold eyelids apart and flush eyes with plenty of cold water for at least 15 minutes. Get medical attention if irritation develops or persists.

SKIN CONTACT FIRST AID:

For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. For hot material exposure, DO NOT try to remove solidified material from the skin. DO NOT try to dissolve with solvents or thinners. Get medical attention immediately.

For exposure to cold material, wash skin with soap and water. Wear protective gloves to minimize skin contamination.

INHALATION FIRST AID:

At elevated temperatures may cause irritation of the eyes and respiratory tract. Although this product is not known to cause respiratory problems, if breathing is difficult, safely remove victim to fresh air and provide oxygen. Get immediate medical attention.

INGESTION FIRST AID:

Ingestion is not considered a potential route of exposure. If vomiting should occur spontaneously, keep airway clear. Contact a physician.

STATEMENT OF PRACTICAL TREATMENT:

Cool exposed area with water to dissipate heat. Get prompt medical attention. No attempt should be made to remove firmly adhering asphaltic material. Only medically approved solvents may be used to remove material from burns, as other solvents could cause further damage.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Closed Cup Flash Point: >116 C (> 240 F) Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: N/A

UEL: N/A

FLAMMABLE PROPERTIES:

Product contains heavy oil (asphalt), may burn although not readily ignitable.

EXTINGUISHING MEDIA:

Carbon dioxide, foam, or dry powder. Do not use water because of violent reaction with hot asphalt. Use water spray to cool fire exposed containers. Exercise care when using water as contact with hot asphalt products may produce steam and violent foaming.

FIRE & EXPLOSION HAZARDS:

Can release vapors that form explosive mixtures at temperatures at or above the flash point.

FIRE FIGHTING INSTRUCTIONS:

As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear. Decomposition may produce fumes, smoke, oxides of sulfur, carbon and hydrocarbons, and possible small quantities of hydrogen sulfide.

COMBUSTION PRODUCTS:

Avoid breathing vapors from heated material. Combustion may produce CO, NOx, SOx and reactive hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES**SAFEGUARDS (PERSONNEL):**

Observe precautions in Protective Equipment section.

INITIAL CONTAINMENT:

Contain spilled material. Allow material to solidify, and scrape up.

LARGE SPILLS PROCEDURE (ANY SIZE):

Allow material to solidify, and scrape up.

7. HANDLING AND STORAGE**SHELF LIFE:**

1 day @ 95 C

HANDLING (PERSONNEL):

When sampling containers use appropriate personal protective equipment. Do not enter storage area unless adequately ventilated. Avoid breathing vapors from heated material. Avoid contact with eyes, skin, and clothing. Breathing hydrogen sulfide must be avoided.

HANDLING (PHYSICAL ASPECTS):

When handling hot material, use protective clothing impervious to this material.

STORAGE PRECAUTIONS:

Do not store at temperatures above 95°C. When asphaltic products are heated, they may give off small amounts of hydrogen sulfide which may accumulate in the head space of storage containers. Use adequate ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**ENGINEERING CONTROLS:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

EYE / FACE PROTECTION REQUIREMENTS:

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Wear safety glasses.

SKIN PROTECTION REQUIREMENTS:

When handling hot material, use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation.

RESPIRATORY PROTECTION REQUIREMENTS:

Under normal use conditions, with adequate ventilation, no special handling equipment is required. When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

EXPOSURE GUIDELINES:

HYDROGEN SULFIDE (H₂S) OSHA TWA: 10 ppm, 14 mg/m³ OSHA STEL: 15 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM	Solid	SOLUBILITY IN WATER	Nil
COLOR	Brown to Black	SPECIFIC GRAVITY	2.3 to 2.9 (H ₂ O=1)
ODOR	Asphalt Odor	MELTING/FREEZING POINT ...	N/A
BOILING POINT	N/A	pH	N/A
VAPOR PRESSURE	<0.1 mm Hg @ 21 C	VISCOSITY	N/A
VAPOR DENSITY	N/A (Air = 1)		

10. STABILITY AND REACTIVITY**STABILITY:**

This compound is stable at ambient conditions.

POLYMERIZATION:

Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS:

Incompatible or can react with acids, bases, oxidizers. Incompatible with water when hot.

DECOMPOSITION:

Decomposition will not occur if handled and stored properly. In the case of a fire, oxides of sulfur, carbon, hydrocarbons, fumes, and smoke may be produced.

CONDITIONS TO AVOID:

Avoid extreme temperatures.

11. TOXICOLOGICAL INFORMATION

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS:

None known.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

CONTAINER DISPOSAL:

Uncleaned empty containers should be disposed of in the same manner as the contents.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL: Cold Mix Asphalt

D.O.T. SHIPPING NAME ...: N/A

D.O.T. HAZARD CLASS: Non-Hazardous

15. REGULATORY INFORMATION

EEC Symbols and Indications of Danger:

Irritant (Xi)

WHMIS Hazard Symbols:

None

Canadian Disclosure List

QUARTZ (SIO₂) (14808-60-7)

SILICON DIOXIDE (AMORPHOUS) (7631-86-9)

MICA (12001-26-2)

IRON OXIDE (1309-37-1)

CERCLA Hazardous Substances

HYDROGEN SULFIDE (H₂S) (7783-06-4) -- RQ 100 lb

RCRA Hazardous Substances

HYDROGEN SULFIDE (H₂S) (7783-06-4) -- RCRA Code: U135

Title V

HYDROGEN SULFIDE (H₂S) (7783-06-4)

SC Toxic Air Pollutants List

HYDROGEN SULFIDE (H₂S) (7783-06-4)

16. OTHER INFORMATION

REASON FOR ISSUE: Update

PREPARED BY.....: Eric Richard

TITLE: Quality Control Manager

APPROVAL DATE: August 14, 2007

SUPERCEDES DATE: January 5, 2005

R&G MSDS NUMBER: 010 (Official Copy)

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