# Cold Mix Cutback Asphalt

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
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## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Cold Mix Cutback Asphalt

**Synonyms:** Slurry Seal, Chip Seal, Petroleum Cold Mix Cutback Asphalt

### 1.2. Intended Use of the Product

**Use of the Substance/Mixture:** Building materials, construction

### 1.3. Name, Address, and Telephone of the Responsible Party

**Company**

GRANITE CONSTRUCTION INCORPORATED
P. O. BOX 50085
WATSONVILLE, CA 95077-5085
831-724-1011

### 1.4. Emergency Telephone Number

**Emergency Number** : 831-724-1011

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

**Classification (GHS-US)**

| | |
|---|---|
| Carc. 1A | H350 |
| STOT RE 1 | H372 |

Full text of H-phrases: see section 16

### 2.2. Label Elements

**GHS-US Labeling**

**Hazard Pictograms (GHS-US)** :

GHS08

**Signal Word (GHS-US)** : Danger

**Hazard Statements (GHS-US)** : H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure.

**Precautionary Statements (GHS-US)** : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, and eye protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P314 - Get medical advice/attention if you feel unwell.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Contains a small amount of hydrogen sulfide. Hydrogen sulfide is a fatal, and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. Heating of this product and storage under elevated temperatures or over long periods of time may release higher amounts of hydrogen sulfide. Hydrogen sulfide is also an asphyxiant. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name | Product Identifier | % | Classification (GHS-US) |
|---|---|---|---|
| Mineral Aggregate (crushed stone, sand and gravel) | N/A | > 90 | Not classified |
| Quartz | (CAS No) 14808-60-7 | 1 - 20 | Carc. 1A, H350<br>STOT RE 1, H372 |
| Asphalt | (CAS No) 8052-42-4 | < 10 | Carc. 2, H351 |
| Silica, cristobalite | (CAS No) 14464-46-1 | < 1 | Carc. 1A, H350<br>STOT RE 1, H372 |
| Tridymite | (CAS No) 15468-32-3 | < 1 | Carc. 1A, H350<br>STOT RE 1, H372 |

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures After Inhalation**: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact**: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**First-aid Measures After Ingestion**: Do not induce vomiting. Rinse mouth. Seek medical attention if any problems arise.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes damage to organs through prolonged or repeated exposure.

**Symptoms/Injuries After Inhalation:** Repeated exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Inhalation of fumes or vapours may cause respiratory irritation. WARNING: irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500ppm can cause rapid unconsciousness and death if not promptly revived.

**Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Symptoms/Injuries After Eye Contact:** Repeated or prolonged contact will cause mechanical irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** May cause cancer. Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Repeated or prolonged skin contact may cause dermatitis and defatting. Product may contain polynuclear aromatic hydrocarbons (PNAs). Evidence from animal studies indicates that prolonged exposure to various PNAs can cause cancer of the lungs, skin and other organs.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Alcohol-resistant foam. Carbon dioxide ($CO_2$). Earth. Sand. Dry chemical powder.

**Unsuitable Extinguishing Media:** Do not use water when molten material is involved, may react violently or explosively on contact with water. Reacts violently on contact with water. A heavy water stream may spread burning liquid.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Contains a small amount of hydrogen sulfide. Hydrogen sulfide is a fatal and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. Heating of this product and storage under elevated temperatures or over long periods of time may release higher amounts of hydrogen sulfide. Hydrogen sulfide is also an asphyxiant.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Do not allow run-off from fire fighting to enter drains or water sources. Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition. Remove containers from fire area if this can be done without risk.

**Other Information:** Do not add water to molten material as this may cause spattering.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures**: Avoid all contact with skin, eyes, or clothing. Do NOT breathe dust, vapor, mist, or spray. Keep away from open flames, hot surfaces and sources of ignition. No smoking.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Emergency Procedures:** Eliminate ignition sources. Stop leak if safe to do so. If possible, stop flow of product.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Where possible allow molten material to solidify naturally.

**Methods for Cleaning Up:** Cool molten material to limit spreading. Allow liquid material to solidify before cleaning up. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.

### 6.4. Reference to Other Sections

Concerning disposal elimination after cleaning, see item 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

**Precautions for Safe Handling:** Protect skin and eyes from contact with molten material. Do NOT breathe dust, vapor, mist, or spray.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Keep in fireproof place.

**Storage Area:** Store in a well-ventilated place. Keep cool.

### 7.3. Specific End Use(s)

Building materials, construction

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

| **Quartz (14808-60-7)** | | |
|---|---|---|
| **USA ACGIH** | ACGIH TWA (mg/m³) | 0.025 mg/m³ (respirable fraction) |
| **USA ACGIH** | ACGIH chemical category | A2 - Suspected Human Carcinogen |
| **USA NIOSH** | NIOSH REL (TWA) (mg/m³) | 0.05 mg/m³ (respirable dust) |
| **USA IDLH** | US IDLH (mg/m³) | 50 mg/m³ (respirable dust) |
| **USA OSHA** | OSHA PEL (STEL) (mg/m³) | 250 mppcf/%$SiO_2$+5, 10mg/$m^3$/%$SiO_2$+2 |

| **Silica, cristobalite (14464-46-1)** | | |
|---|---|---|
| **USA ACGIH** | ACGIH TWA (mg/m³) | 0.025 mg/m³ (respirable fraction) |
| **USA ACGIH** | ACGIH chemical category | Suspected Human Carcinogen |
| **USA NIOSH** | NIOSH REL (TWA) (mg/m³) | 0.05 mg/m³ (respirable dust) |
| **USA IDLH** | US IDLH (mg/m³) | 25 mg/m³ (respirable dust) |

| **Tridymite (15468-32-3)** | | |
|---|---|---|
| **USA NIOSH** | NIOSH REL (TWA) (mg/m³) | 0.05 mg/m³ (respirable dust) |
| **USA IDLH** | US IDLH (mg/m³) | 25 mg/m³ (respirable dust) |

| **Asphalt (8052-42-4)** | | |
|---|---|---|
| **USA ACGIH** | ACGIH TWA (mg/m³) | 0.5 mg/m³ (fume, inhalable fraction) |
| **USA ACGIH** | ACGIH chemical category | Not Classifiable as a Human Carcinogen fume, coal tar-free |
| **USA NIOSH** | NIOSH REL (ceiling) (mg/m³) | 5 mg/m³ (fume) |

### 8.2. Exposure Controls

**Appropriate Engineering Controls** : Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment** : Protective goggles. Gloves. Protective clothing. Dust formation: dust mask.

**Materials for Protective Clothing** : Chemically resistant materials and fabrics.

**Hand Protection** : Wear chemically resistant protective gloves.

**Eye Protection** : Chemical goggles or safety glasses.

**Skin and Body Protection** : Wear suitable protective clothing.

**Respiratory Protection** : Use NIOSH-approved dust mask if dust has the potential to become airborne.

**Environmental Exposure Controls** : Do not allow the product to be released into the environment.

**Consumer Exposure Controls** : Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

| | |
|---|---|
| **Physical State** | : Liquid |
| **Appearance** | : Course black material with volatile liquid component |
| **Odor** | : Petroleum odor |
| **Odor Threshold** | : No data available |
| **pH** | : No data available |
| **Evaporation Rate** | : No data available |
| **Melting Point** | : No data available |
| **Freezing Point** | : No data available |
| **Boiling Point** | : No data available |
| **Flash Point** | : No data available |
| **Auto-ignition Temperature** | : No data available |
| **Decomposition Temperature** | : No data available |
| **Flammability (solid, gas)** | : No data available |
| **Vapor Pressure** | : No data available |
| **Relative Vapor Density at 20 °C** | : No data available |
| **Relative Density** | : No data available |
| **Specific Gravity** | : 2.2 - 2.5 |
| **Solubility** | : Insoluble in water |
| **Partition Coefficient: N-Octanol/Water** | : No data available |
| **Viscosity** | : No data available |

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.

**10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4. Conditions to Avoid:** Incompatible materials.

**10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

**10.6. Hazardous Decomposition Products:** Quartz (silica) will dissolve in hydroflouric acid producing a corrosive gas, silicon tetrafluoride.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Not classified

| Quartz (14808-60-7) | |
|---|---|
| **LD50 Oral Rat** | > 5000 mg/kg |
| **LD50 Dermal Rat** | > 5000 mg/kg |

| Asphalt (8052-42-4) | |
|---|---|
| **LD50 Oral Rat** | > 5000 mg/kg |
| **LD50 Dermal Rabbit** | > 2000 mg/kg |
| **LC50 Inhalation Rat** | > 94.4 mg/m³ |

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** May cause cancer.

| Quartz (14808-60-7) | |
|---|---|
| **IARC group** | 1 |
| **National Toxicology Program (NTP) Status** | Known Human Carcinogens. |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

| Silica, cristobalite (14464-46-1) | |
|---|---|
| **IARC group** | 1 |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

| Tridymite (15468-32-3) | |
|---|---|
| **IARC group** | 1 |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

| Asphalt (8052-42-4) | |
|---|---|
| **IARC group** | 2B |
| **National Toxicology Program (NTP) Status** | Twelfth Report - Items under consideration. |
| **OSHA Hazard Communication Carcinogen List** | In OSHA Hazard Communication Carcinogen list. |

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Causes damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Repeated exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Inhalation of fumes or vapours may cause respiratory irritation. WARNING: irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500ppm can cause rapid unconsciousness and death if not promptly revived.

**Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Symptoms/Injuries After Eye Contact:** Repeated or prolonged contact will cause mechanical irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** May cause cancer. Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Repeated or prolonged skin contact may cause dermatitis and defatting. Product may contain polynuclear aromatic hydrocarbons (PNAs). Evidence from animal studies indicates that prolonged exposure to various PNAs can cause cancer of the lungs, skin and other organs.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** No additional information available

**12.2. Persistence and Degradability** No additional information available

**12.3. Bioaccumulative Potential**

| Asphalt (8052-42-4) | |
|---|---|
| **BCF fish 1** | (no bioaccumulation expected) |
| **Log Pow** | > 6 |

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

**Proper Shipping Name** : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)

**Hazard Class** : 9

**Identification Number** : UN3257

**Label Codes** : 9


**Packing Group** : III

**ERG Number** : 128

### 14.2. In Accordance with IMDG

**Proper Shipping Name** : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)

**Hazard Class** : 9

**Identification Number** : UN3257

**Packing Group** : III

**Label Codes** : 9

**EmS-No. (Fire)** : F-A

**EmS-No. (Spillage)** : S-P


### 14.3. In Accordance with IATA

**Proper Shipping Name** : ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)

**Identification Number** : UN3257

**Hazard Class** : 9

**Label Codes** : 9


**ERG Code (IATA)** : 9L

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

| **Cold Mix Cutback Asphalt** | |
|---|---|
| **SARA Section 311/312 Hazard Classes** | Delayed (chronic) health hazard |

| **Quartz (14808-60-7)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| **SARA Section 311/312 Hazard Classes** | Delayed (chronic) health hazard |

| **Silica, cristobalite (14464-46-1)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| **SARA Section 311/312 Hazard Classes** | Delayed (chronic) health hazard |

| **Tridymite (15468-32-3)** | |
|---|---|
| **SARA Section 311/312 Hazard Classes** | Delayed (chronic) health hazard |

| **Asphalt (8052-42-4)** | |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| **SARA Section 311/312 Hazard Classes** | Delayed (chronic) health hazard |

### 15.2 US State Regulations

| **Quartz (14808-60-7)** | |
|---|---|
| **U.S. - California - Proposition 65 - Carcinogens List** | WARNING: This product contains chemicals known to the State of California to cause cancer. |

| **Quartz (14808-60-7)** |
|---|
| U.S. - Massachusetts - Right To Know List |
| U.S. - New Jersey - Right to Know Hazardous Substance List |
| U.S. - Pennsylvania - RTK (Right to Know) List |

| **Silica, cristobalite (14464-46-1)** |
|---|

| |
|---|
| U.S. - Massachusetts - Right To Know List |
| U.S. - New Jersey - Right to Know Hazardous Substance List |
| U.S. - Pennsylvania - RTK (Right to Know) List |

| **Tridymite (15468-32-3)** |
|---|
| U.S. - Massachusetts - Right To Know List |
| U.S. - New Jersey - Right to Know Hazardous Substance List |
| U.S. - Pennsylvania - RTK (Right to Know) List |

| **Asphalt (8052-42-4)** |
|---|
| U.S. - Massachusetts - Right To Know List |
| U.S. - New Jersey - Right to Know Hazardous Substance List |
| U.S. - Pennsylvania - RTK (Right to Know) List |

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 07/16/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases**:

| | |
|---|---|
| Carc. 1A | Carcinogenicity Category 1A |
| Carc. 2 | Carcinogenicity Category 2 |
| STOT RE 1 | Specific target organ toxicity (repeated exposure) Category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H335 | May cause respiratory irritation |
| H350 | May cause cancer |
| H351 | Suspected of causing cancer |
| H372 | Causes damage to organs through prolonged or repeated exposure |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)