SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Chemical Name
CAS No.
Trade Name(s)
Cold Mix Asphalt
Mixture
Mixture
Asphalt repair, Permanent Cold Mix, Temporary Cold Patch

Relevant identified uses of the substance or mixture and uses advised against
Identified Use(s)
Uses Advised Against
Road Paving Asphalt
None.

Details of the supplier of the safety data sheet
Company Identification
Dunn Construction Company, Inc.
3905 Messer Airport Hwy.
Birmingham, AL 35222

Telephone
205-592-3866

Emergency telephone number
Emergency Phone No.
Not classified as dangerous for supply/use. Please contact the supplier above during normal business hours.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
OSHA HCS (29 CFR 1910.1200) / GHS Classification
Eye Irrit. 2; Skin Sens. 1b

Label elements
Hazard Symbol

Signal Word(s)
WARNING

Hazard Statement(s)
Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary Statement(s)
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands and exposed skin after use.
Contaminated work clothing should not be allowed out of the workplace.

Other hazards
Skin contact may increase susceptibility to sunburn.
Mechanical disruption (e.g., milling, cutting, chipping) of cured asphalt pavement may release crystalline silica dust from the aggregate.

Additional Information
None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Composition/information on ingredients</th>
<th>% wt.</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate (crushed stone, sand, gravel, slag)</td>
<td>&gt; 90</td>
<td>Various</td>
</tr>
<tr>
<td>Petroleum asphalt / bitumen^</td>
<td>&lt; 5</td>
<td>8052-42-4</td>
</tr>
<tr>
<td>Cold mix additives</td>
<td>&lt; 5</td>
<td>Various</td>
</tr>
</tbody>
</table>
COLD MIX ASPHALT

*Contains: <0.05% of 3 - 7 ring Polycyclic Aromatic Hydrocarbons (PAHs).

Other Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below. Please see Section 8 of SDS for more details.

- Contains: <0.1% airborne crystalline silica (inherent in aggregate) and <0.1% hydrogen sulfide.

Additional Information - None

**SECTION 4: FIRST AID MEASURES**

Description of first aid measures

Inhalation
Not normally required. Move person to fresh air. Apply artificial respiration if necessary. If symptoms persist, obtain medical attention.

Skin Contact
Gently wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye Contact
Flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation develops and persists, get medical attention.

Ingestion
Not normally required. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

Most important symptoms and effects, both acute and delayed
May cause an allergic skin reaction.

Indication of any immediate medical attention and special treatment needed
None known

**SECTION 5: FIRE-FIGHTING MEASURES**

Extinguishing Media
- Suitable Extinguishing Media
  Extinguish with carbon dioxide, dry chemical, foam or water spray.
- Unsuitable Extinguishing Media
  None anticipated.

Special hazards arising from the substance or mixture
Combustion causes toxic fumes. Combustion products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides

Advice for fire-fighters
A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures
Avoid contact with skin and eyes.

Environmental precautions
Not normally required.

Methods and material for containment and cleaning up
Allow product to cool/solidify and pick up as a solid.

Reference to other sections
None

Additional Information
None.

**SECTION 7: HANDLING AND STORAGE**

Precautions for safe handling
Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities
- Storage temperature
  Store at temperatures not exceeding the product’s flash point.
- Incompatible materials
  Strong oxidizing agents.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>SUBSTANCE.</th>
<th>CAS No.</th>
<th>(8hr TWA) PEL (OSHA) *</th>
<th>(STEL) TLV (ACGIH)</th>
<th>PEL (OSHA)</th>
<th>TLV (ACGIH)</th>
<th>Note:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt fume</td>
<td>--------</td>
<td>0.5 mg/m³ (I)</td>
<td>--------</td>
<td>------------</td>
<td>-------------</td>
<td>See below</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>--------</td>
<td>10 mg/m³ %SiO₂ + 2</td>
<td>0.025 mg/m³ ^</td>
<td>--------</td>
<td>-------------</td>
<td>See below</td>
</tr>
</tbody>
</table>

*Inhalable benzene-soluble fraction; ^Suspected Human Carcinogen; *Refer to OSHA 29 CFR 1910.1000 & 29 CFR 1926.55; 8hr TWA = 8 hour time-weighted average; STEL = Short Term Exposure Limit.

Recommended monitoring method

Exposure controls

Appropriate engineering controls

Use only outdoors or in a well-ventilated area.

Personal protection equipment

Eye/face protection

The following to be used as necessary: Safety Glasses

Skin protection (Hand protection/ Other)

The following to be used as necessary: Leather or thick textile gloves.

Respiratory protection

Not normally required.

Thermal hazards

Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Do not discharge waste and/or cleaning water via public sewer system. Ensure waste is collected and contained.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- Appearance: Solid
- Color: Dark brown / Black
- Odor: Asphalt / Bitumen
- Odor Threshold (ppm): Not available.
- pH (Value): Not available.
- Melting Point (°C) / Freezing Point (°C): Not available.
- Boiling point/boiling range (°C): > 371 (>700 °F)
- Flash Point (°C): > 232 (> 450 °F)
- Evaporation Rate: Not available.
- Flammability (solid, gas): Not applicable.
- Explosive Limit Ranges: Not applicable.
- Vapor pressure (Pascal): Not determined.
- Vapor Density (Air=1): Not determined.
- Density (g/ml): 2.2 - 2.7
- Solubility (Water): Negligible
COLD MIX ASPHALT

Solubility (Other) Not known
Partition Coefficient (n-Octanol/water) Not available.
Auto Ignition Point (°C) Not available.
Decomposition Temperature (°C) Not available.
Kinematic Viscosity (cSt) @ 40°C Not available.
Explosive properties Not explosive.
Oxidizing properties Not oxidizing.
Other information Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity Stable under normal conditions.
Chemical stability Stable.
Possibility of hazardous reactions May react violently with: Strong oxidizing agents
Conditions to avoid Incompatible materials
Incompatible materials Oxidizers
Hazardous decomposition product(s) Combustion causes toxic fumes. Combustion products: Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects
Acute toxicity LD50 (rat): >5000 mg/kg bw
LD50 (dermal): >2000 mg/kg bw
LC50 (inhalation, fume): >94.4 mg/m³
Irritation/Corrosivity Causes serious eye irritation.
Sensitization May cause an allergic skin reaction.
Repeated dose toxicity Not to be expected.
Carcinogenicity Not to be expected when used as a cold-mix product.

<table>
<thead>
<tr>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Yes.*</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

Mutagenicity Not to be expected.
Reproductive toxicity Not to be expected.

Other information *IARC (2013, volume 103) identifies that “occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans (Group 2B).” However, classification as a carcinogen under OSHA 29 CFR 1910.1200 is not warranted given the absence of positive cancer findings in human epidemiological studies and in cancer studies with laboratory animals when exposed dermally or by inhalation to asphalt products or fume condensates that are typical of road paving applications. IARC (2013, volume 103) also identifies that “occupational exposures to oxidized bitumens and their emissions during roofing are probably carcinogenic to humans (Group 2A).” Roofing shingles, which are considered an article under OSHA 29 CFR 1910.1200, are sometimes recycled into road paving asphalt mix. Emissions from oxidized bitumen, e.g., from shingles, at road paving temperatures are not expected to be qualitatively different than emissions from straight-run bitumens, and therefore would not warrant a carcinogen classification under OSHA 29 CFR 1910.1200.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity
Short term LL50 (48 hour): >1000 mg/l (Fish)
LL50 (48 hour): >1000 mg/L (Aquatic Invertebrates)
EL50 (48 hour): >1000 mg/L (Aquatic Plants)
Long Term No data
COLD MIX ASPHALT

Persistence and degradability
The product is poorly biodegradable.

Bioaccumulative potential
The product has low potential for bioaccumulation.

Mobility in soil
The product has low mobility in soil.

Results of PBT and vPvB assessment
Not classified as PBT or vPvB.

Other adverse effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Additional Information
None known.

SECTION 14: TRANSPORT INFORMATION

Ground or Water Domestic Voyage (DOT):
Not classified as dangerous for transport.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

RCRA Hazardous Waste Number (40 CFR 261.33): None

US RCRA Hazard Class: Not applicable.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>RQ (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

SARA 311/312 - Hazard Categories: None

SARA 313 - Toxic Chemicals (40 CFR 372):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>TPQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION

Additional Information

The following sections contain revisions or new statements: 1-16.

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