

Hot Mix Cold Lay (HMCL) Asphalt

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Hot Mix Cold Lay (HMCL) Asphalt
 Product code : Not Available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Road Paving Asphalt

1.3. Details of the supplier of the safety data sheet

Oldcastle Materials - Texas
 1320 Arrow Point Drive, Ste.600
 Cedar Park, TX 78613
 T 512-861-7100

1.4. Emergency telephone number

Emergency number : CHEMTREC: 800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

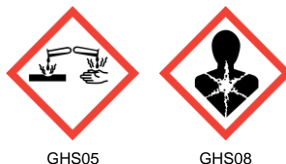
GHS-US classification

Skin Irrit. 2
 Eye Dam. 1
 Carc. 2

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Causes skin irritation. Causes serious eye damage. Suspected of causing cancer.

Precautionary statements (GHS-US) : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Limestone	(CAS No) 1317-65-3	50 - 100
Quartz ¹	(CAS No) 14808-60-7	< 10
Asphalt	(CAS No) 8052-42-4	1 - 10

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

¹Quartz is encapsulated within the product and will never be airborne particles of respirable size for the product's intended use.

Hot Mix Cold Lay (HMCL) Asphalt

Safety Data Sheet

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. In case of contact with hot or molten product, get immediate medical advice/attention. Burns caused by molten material must be treated clinically. DO NOT remove asphalt from skin, as underlying tissue may easily be torn away.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately. Burns caused by molten material must be treated clinically.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. Burns caused by molten material must be treated clinically.

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

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. Cutting, crushing or grinding of hardened asphalt may release respirable crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Hot product may cause severe thermal burns.
- Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Hot product may cause severe thermal burns.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting. Hot product may cause severe thermal burns.
- Other health effects : Hydrogen sulfide and other sulfur-containing gases can evolve from this product at elevated temperatures. Hydrogen sulfide can cause respiratory paralysis and death, depending on concentrations and duration of exposure. Do not rely on ability to smell vapors, since odor fatigue rapidly occurs. Effects of overexposure include irritation of the nose and throat, nausea, vomiting and signs of nervous system depression.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible). Remove hardened asphalt and treat as a thermal burn. If hydrogen sulfide is inhaled, the first priority in treatment should be the establishment of adequate ventilation and the administration of 100% oxygen. If unresponsive to supportive care, nitrites may be an effective antidote.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water fog, foam, carbon dioxide, dry chemicals.
- Unsuitable extinguishing media : Do not use a heavy water stream. Water stream may cause violent eruptions and spreading of asphalt.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable vapors may accumulate in closed tank headspaces. Products of combustion may include, and are not limited to: oxides of carbon, oxides of sulfur. When heated, this product may release toxic hydrogen sulfide (H₂S).

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

Hot Mix Cold Lay (HMCL) Asphalt

Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Tripping accidents have occurred because of asphalt build up on bottoms of shoes and boots. Materials should be removed regularly to prevent such accidents. Significant concentrations of hydrogen sulfide (H₂S) gas can be generated and accumulate in storage tanks and bulk transport compartments which may require additional precautions and procedures during loading and unloading. When opening covers and outlet caps on storage tanks, use face shield and gloves to avoid possible injury from pressurized product. Cutting, crushing or grinding of hardened asphalt may release respirable crystalline silica.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store away from heat. Keep out of direct sunlight.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Limestone (1317-65-3)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (total dust)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
OSHA	OSHA PEL (TWA)	(30)/(%SiO ₂ + 2) mg/m ³ (total dust) (250)/(%SiO ₂ + 5) mppcf (respirable fraction) (10)/(%SiO ₂ + 2) mg/m ³ (respirable fraction)
Asphalt (8052-42-4)		
ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (fume, inhalable fraction)
OSHA	Not applicable	

8.2. Exposure controls

- Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear chemically resistant protective gloves. Wear insulated gloves when handling hot product.
- Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded.
- Environmental exposure controls : Maintain levels below Community environmental protection thresholds.
- Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Semi-solid with crushed aggregate
- Color : Black
- Odor : Tar / Sulphur
- Odor threshold : No data available

Hot Mix Cold Lay (HMCL) Asphalt

Safety Data Sheet

pH	: Not applicable
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Solubility	: Negligible
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials. Do not allow hot molten material to contact water.

10.5. Incompatible materials

Strong oxidizing agents. Strong Acids.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, oxides of sulfur. When heated, this product may release toxic hydrogen sulfide (H₂S).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

Hot Mix Cold Lay (HMCL) Asphalt	
LD50 oral rat	Not available
LD50 dermal rabbit	Not available
LC50 inhalation rat	Not available
Asphalt (8052-42-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.

Hot Mix Cold Lay (HMCL) Asphalt

Safety Data Sheet

Carcinogenicity : Suspected of causing cancer. This product contains non-respirable crystalline silica. When respirable, crystalline silica is classified by IARC and NTP as a known human carcinogen. Cutting, crushing or grinding hardened product or other crystalline silica-bearing materials will release respirable crystalline silica.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans (airborne particles of respirable size)
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens (airborne particles of respirable size)
Asphalt (8052-42-4)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	5 - Twelfth Report - Items under consideration

Reproductive toxicity : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met. This product contains non-respirable crystalline silica. However, cutting, crushing or grinding hardened product or other crystalline silica-bearing materials will release respirable crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious disabling and fatal lung disease.

Aspiration hazard : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause respiratory tract irritation. Cutting, crushing or grinding of hardened asphalt may release respirable crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Hot product may cause severe thermal burns.

Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Hot product may cause severe thermal burns.

Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting. Hot product may cause severe thermal burns.

Other health effects : Hydrogen sulfide and other sulfur-containing gases can evolve from this product at elevated temperatures. Hydrogen sulfide can cause respiratory paralysis and death, depending on concentrations and duration of exposure. Do not rely on ability to smell vapors, since odor fatigue rapidly occurs. Effects of overexposure include irritation of the nose and throat, nausea, vomiting and signs of nervous system depression.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Hot Mix Cold Lay (HMCL) Asphalt	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Hot Mix Cold Lay (HMCL) Asphalt	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Hot Mix Cold Lay (HMCL) Asphalt

Safety Data Sheet

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. US State regulations

Hot Mix Cold Lay (HMCL) Asphalt

State or local regulations	This product contains chemicals known to the State of California to cause cancer.
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SECTION 16: Other information

Date of issue : 01/20/2016

Revision date : 08/31/2016

Other information : None.

Disclaimer: While the information provided in this safety data sheet is believed to provide a useful summary of the hazards of hot mix cold lay material as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain appropriate training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with hot mix cold lay. The information provided herein was believed by Oldcastle Materials to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of product and to determine the suitability of the product for its intended use.