

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

Reviewed on 06/02/2015

1 Identification

- **Product identifier**
- **Trade name: Hot Mix Asphalt**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Product description** Hot Mix Asphalt
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Commercial Asphalt Co.
7200 Hemlock Lane, Suite 200
Maple Grove, MN 55311
Phone: (763) 424-5400
www.tillercorp.com
- **Emergency telephone number:** (763) 424-5400

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- **Additional information:**

DANGER! RELEASE OF TOXIC HYDROGEN SULFIDE (H₂S) GAS CAN BE EMITTED FROM HOT ASPHALT. DUE TO ODOR MASKING/FATIGUE OF THE SENSE OF SMELL, THE ODOR OF H₂S (ROTTEN EGGS) CANNOT BE RELIED UPON AS A MEANS OF DETECTION. INHALATION OF A FEW BREATHS OF HIGH CONCENTRATIONS (700 PPM) COULD BE FATAL.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**

Aggregate (crushed stone, sand and gravel)
Asphalt

- **Hazard statements**

Causes skin and eye irritation.
May cause respiratory irritation.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves.
Wash thoroughly after handling.

(Contd. on page 2)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

Reviewed on 06/02/2015

Trade name: Hot Mix Asphalt

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 Call a poison center/doctor if you feel unwell.
 If skin irritation occurs: Get medical advice/attention.
 If eye irritation persists: Get medical advice/attention.
 If on skin: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 Store locked up.
 Store in a well-ventilated place. Keep container tightly closed.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Unknown acute toxicity:**

100 percent of the mixture consists of ingredient(s) of unknown toxicity.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMS-ratings (scale 0 - 4)**



· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous Components:**

	Aggregate (crushed stone, sand and gravel)	90-95%
	⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
CAS: 8052-42-4	Asphalt	3-7%
RTECS: CI 9900000	⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Eye Contact: Heated material can cause severe thermal burns. Asphalt fumes may cause eye irritation. Exposure to hydrogen sulfide at concentrations above 4 ppm may cause eye irritation.

Skin Contact: Heated material can cause severe thermal burns. Emissions may cause mild irritation. There may be an increased sensitivity to sunburn when the skin is exposed to asphalt fumes. Chronic exposure to petroleum asphalt has caused skin disorders such as dermatitis, folliculitis, or oil acne.

Ingestion: Direct contact with heated material can produce thermal burns on contacted tissues. Gastric masses and stomach obstructions have been reported in individuals who have chewed and swallowed asphalt.

Inhalation: Emissions from heated petroleum asphalt may have an unpleasant odor, and may produce

(Contd. on page 3)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

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Trade name: Hot Mix Asphalt

nausea and irritation of the upper respiratory tract. Naphtha component vapors (hot asphalt) at high concentrations in enclosed spaces may cause symptoms of euphoria, respiratory irritation and edema, headaches, dizziness, drowsiness, convulsions, coma, cyanosis and generalized depression. Hydrogen sulfide causes respiratory irritation at concentrations of 4 to 100 ppm. At low concentration H₂S has a rotten egg odor. At elevated concentrations H₂S acts as a systemic poison, causing unconsciousness and death by respiratory paralysis. Chronic inhalation of petroleum asphalt emissions may contribute to respiratory irritation. If hardened asphalt concrete is subjected to mechanical forces which generate dust particles, exposure to respirable crystalline silica dust is possible.

Medical Conditions which May be Aggravated by Inhalation or Dermal Exposure: Existing abnormal conditions of the skin and/or respiratory system may be aggravated by exposure to asphalt fumes and by petroleum distillates. Exposure to dust from disrupted hardened asphalt concrete may aggravate respiratory diseases or dysfunctions, and skin and eye conditions.

• **After inhalation:**

Supply fresh air.

Seek medical treatment in case of complaints.

In case of unconsciousness, place patient securely on side position for transportation.

• **After skin contact:**

Hot Material – Remove contaminated clothing and immediately flush in cool water for at least 15 minutes. Apply iced water or cold packs to burned area if burned area is less than 10% of the body surface. Do not attempt to remove material from the burn. Get prompt medical attention.

Cold Material – Clean exposed skin with oil dissolving skin cleaner. Do not use solvents or thinners to remove material from the skin.

• **After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

Beyond flushing, do not attempt to remove material from eyes except under medical supervision.

• **After swallowing:**

Do not induce vomiting; immediately call for medical help.

Rinse out mouth and then drink plenty of water.

• **Information for doctor:**

• **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

• **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures

• **Extinguishing media**

• **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

• **Special hazards arising from the substance or mixture** Explosive vapors

• **Advice for firefighters**

• **Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental release measures

• **Personal precautions, protective equipment and emergency procedures** Not required.

• **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

• **Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

• **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

Reviewed on 06/02/2015

Trade name: Hot Mix Asphalt

See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Protect from heat.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool, dry place away from sparks and flame.
Store in a well ventilated place.
Keep container tightly closed.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**

· **Components with occupational exposure limits:**

Aggregate (crushed stone, sand and gravel)

PEL	Short-term value: 5 mg/m ³ Long-term value: 15 mg/m ³
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8052-42-4 Asphalt

REL	Ceiling limit value: 5* mg/m ³ *15-min; See Pocket Guide App. A
TLV	Long-term value: 0.5* mg/m ³ *inh. fraction; as benzene-soluble aerosol; BEIp

· **Ingredients with biological limit values:**

8052-42-4 Asphalt

BEI	- urine end of shift at end of workweek 1-Hydroxypyrene with hydrolysis (nonquantitative)
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· **Additional information:**

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. The lists that were valid during the creation of this SDS were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

Reviewed on 06/02/2015

Trade name: Hot Mix Asphalt

Avoid contact with the eyes and skin.

· **Breathing equipment:**



NIOSH/OSHA or EN approved respiratory protection is recommended for use in airborne concentrations exceeding exposure limits.

Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Course material

Color: Black

· **Odor:** Petrol-like

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Not determined.

Boiling point/Boiling range: 469 °C (876 °F)

· **Flash point:** > 127 °C (> 261 °F)

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:** 490 °C (914 °F)

· **Decomposition temperature:** Not determined.

(Contd. on page 6)

Safety Data Sheet (SDS)

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Issue date 06/02/2015

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Trade name: Hot Mix Asphalt

- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapor pressure:** Not applicable.
- **Density @ 20 °C (68 °F):** 2.2 g/cm³ (18.359 lbs/gal)
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Solvent content:**
 - Organic solvents:** 0.0 %
 - Solids content:** 95.0 %
- **Other information:** No further relevant information available.

10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Heat, flame and ignition sources.
- **Incompatible materials:**
 - Strong oxidizing agents.
 - Adding water to hot asphalt presents an explosion hazard.
- **Hazardous decomposition products:**
 - Carbon monoxide, nitrogen oxide, sulfur dioxide, hydrogen sulfide, and various hydrocarbons may be released by thermal decomposition. Hazardous vapors may collect in enclosed vessels or areas if not properly ventilated.

11 Toxicological information

- **Information on toxicological effects:**
 - **Acute toxicity:**
 - **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:**
 - Irritating effect.
 - Causes serious eye irritation.
 - **Additional toxicological information:**
 - The product shows the following dangers according to internally approved calculation methods for preparations:

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

Reviewed on 06/02/2015

Trade name: Hot Mix Asphalt

Irritant

Acute and chronic overexposure to this material or its components may cause systemic toxicity, including adverse effects to the following: liver, kidney, lung, skin, spleen, thymus, blood elements, lymph nodes, testes, bone marrow, and nervous system.

Exposure to components of this material may cause the following specific symptoms, depending on the concentration and duration of exposure: anemia, pallor, fatigue, loss of appetite, anxiety, and melanosis.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately inhaling vapors may be harmful or fatal.

Emissions from heated petroleum asphalt may have an unpleasant odor, and may produce nausea and irritation of the upper respiratory tract. Naptha component vapors (hot asphalt) at high concentrations in enclosed spaces may cause symptoms of euphoria, respiratory irritation and edema, headaches, dizziness, drowsiness, conclusions, coma, cyanosis and generalized depression. Hydrogen sulfide causes respiratory irritation at concentrations of 4 to 100 ppm. At low concentration H2S has a rotten egg odor. At elevated concentrations H2S acts as a systemic poison, causing unconsciousness and death by respiratory paralysis.

Chronic inhalation of petroleum asphalt emissions may contribute to respiratory irritation. If hardened asphalt concrete is subjected to mechanical forces which generate dust particles, exposure to respirable crystalline silica dust is possible.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

- Group 1 - Carcinogenic to humans
- Group 2A - Probably carcinogenic to humans
- Group 2B - Possibly carcinogenic to humans
- Group 3 - Not classifiable as to its carcinogenicity to humans
- Group 4 - Probably not carcinogenic to humans

8052-42-4	Asphalt	2B
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· **NTP (National Toxicology Program)**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

12 Ecological information

· **Toxicity**

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not known to be hazardous to water.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Observe all federal, state and local environmental regulations when disposing of this material.
Recycle or dispose with household trash.

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OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/02/2015

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Trade name: Hot Mix Asphalt

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es)**
- **DOT, ADR, IMDG, IATA**
- **Class** Non-Regulated Material
- **Packing group**
- **DOT, ADR, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
- **UN "Model Regulation":** -

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):	
None of the ingredients are listed.	
· Section 313 (Specific toxic chemical listings):	
None of the ingredients are listed.	
· TSCA (Toxic Substances Control Act):	
8052-42-4	Asphalt
· California Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients are listed.	
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients are listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients are listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients are listed.	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
None of the ingredients are listed.	
· TLV (Threshold Limit Value established by ACGIH)	
8052-42-4	Asphalt A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
8052-42-4	Asphalt

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Aggregate (crushed stone, sand and gravel)

Asphalt

· **Hazard statements**

Causes skin and eye irritation.

May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves.

Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· **State Right to Know**

	Aggregate (crushed stone, sand and gravel)	90-95%
	⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
CAS: 8052-42-4	Asphalt	3-7%
RTECS: CI 9900000	⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	
All ingredients are listed.		

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision** 06/02/2015 / -

(Contd. on page 10)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· *** Data compared to the previous version altered.**

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