

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture
Product Name: Asphalt Cement (Modified)
Synonyms: Asphalt Binder; PG64-28, PG58-28, PG52-34, PG58-34, PG64S-28, PG64H-28, PG58S-28, PG58H-28, PG52S-34, PG58S-28

Intended Use of the Product

Use of the substance/mixture: Binder component of Hot Mix Asphalt (Pavement).

Name, Address, and Telephone of the Responsible Party

Company: All States Construction, Inc. & Subsidiaries
325 Amherst Road
Sunderland, MA 01375
413-665-7021
www.asmg.com

Manufacturer: All States Asphalt, LLC.
901 River Road
Deerfield, MA 01342
413-773-9798

Emergency Telephone Number

Emergency Number: 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)
Carc. 1B H350
Aquatic Acute 3 H402
Full text of H-phases: see Section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

Danger

Hazard Statements (GHS-US)

H350 - May cause cancer.
H402 - Harmful to aquatic life.

Precautionary Statements (GHS-US)

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 - If exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

Other Hazards

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. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas. Vapor in the headspace of tanks and containers may ignite and explode at temperatures exceeding auto-ignition temperature, where vapor concentrations are within the flammability range. May ignite on surfaces at temperatures above auto-ignition temperature. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Repeated exposure may cause skin dryness or cracking.

Unknown Acute Toxicity (GHS-US)

No Data Available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Name	Product Identifier	%	Classification (GHS-US)
Asphalt	(CAS No) 8052-42-4	> 89	Not classified
Extracts, petroleum, heavy paraffinic distillate	(CAS No) 64724-04-7	< 10	Carc. 1B, H350 Aquatic Acute 2, H401
Superphosphoric acid	(CAS No) 8017-16-1	< 1	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

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 where possible).

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid Measures After Skin Contact: Rinse immediately with plenty of water. Remove contaminated clothing. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. Seek medical attention for thermal burns. Do not attempt to forcibly remove material from skin after cooling.

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

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention if a large amount is swallowed.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Injuries: During processing, inhalation of fumes may cause dizziness and/or irritation to the eyes, nose, and throat. Hot molten product will cause thermal burns to the skin.

Symptoms/Injuries After Inhalation: Inhalation of fumes or vapors 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: May cause skin irritation. Prolonged or repeated contact with the skin may cause dermatitis. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Eye Contact: Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause nausea, vomiting, and diarrhea.

Chronic Symptoms: 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.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If burned by hot product, cool affected area immediately with cool water. Do not attempt to remove solidified material from skin. Seek medical attention immediately. If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES**Extinguishing Media**

Suitable Extinguishing Media: Alcohol-resistant foam. Carbon dioxide (CO₂). 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.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable.

Explosion Hazard: Product is not explosive. 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.

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
Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing dust, vapor, mist, or spray.

For Non-emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

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

Environmental Precautions

Prevent entry to sewers and public waters.

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: Clear up spills immediately and dispose of waste safely. 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.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE
Precautions for Safe Handling

Precautions for Safe Handling: Protect skin and eyes from contact with molten material. Avoid breathing dust, vapor, mist, or spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s)

Binder component of Hot Mix Asphalt (Pavement).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
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).

<i>Asphalt (8052-42-4)</i>		
USA ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (fume, inhalable fraction)
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	5 mg/m ³ (fume)
<i>Hydrogen sulfide (7783-06-4)</i>		

USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	15 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	10 ppm
USA IDLH	US IDLH (ppm)	100 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm

Exposure Controls

Appropriate Engineering Controls

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. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Protective clothing. Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing

With molten material wear thermally protective clothing.

Hand Protection

If material is hot, wear thermally resistant protective gloves.

Eye Protection

Chemical goggles or safety glasses.

Skin and Body Protection

Wear suitable protective clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Consumer Exposure Controls

Do not eat, drink or smoke during use.

Other Information

When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

<i>Physical State</i>	Liquid
<i>Appearance</i>	Black semi-solid
<i>Odor</i>	No data available
<i>Odor Threshold</i>	No data available
<i>pH</i>	No data available
<i>Evaporation Rate</i>	No data available
<i>Melting Point</i>	No data available
<i>Freezing Point</i>	No data available
<i>Boiling Point</i>	No data available
<i>Flash Point</i>	270 - 315 °C (518 - 599 °F)
<i>Auto-ignition Temperature</i>	No data available
<i>Decomposition Temperature</i>	No data available
<i>Flammability (solid, gas)</i>	No data available
<i>Vapor Pressure</i>	No data available
<i>Relative Vapor Density at 20 °C</i>	No data available
<i>Relative Density</i>	8.54 - 8.59 Lbs./Gal @15.6 °C (60 °F)
<i>Specific Gravity</i>	1.025-1.030 @15.6 °C (60 °F)
<i>Solubility</i>	Insoluble
<i>Partition Coefficient: N-Octanol/Water</i>	No data available
<i>Viscosity</i>	150-500 cP @135 °C (275 °F)

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Thermal decomposition generates : Carbon oxides (CO, CO₂). Sulfur oxides. Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity: Not classified

Asphalt (8052-42-4)

LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg

<i>Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)</i>	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg

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.

<i>Asphalt (8052-42-4)</i>	
IARC group	2B
National Toxicology Program (NTP) Status	Twelfth Report - Items under consideration.

Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Inhalation of fumes or vapors 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: May cause skin irritation. Prolonged or repeated contact with the skin may cause dermatitis. Risk of thermal burns on contact with molten product.
Symptoms/Injuries After Eye Contact: May cause eye irritation. Risk of thermal burns on contact with molten product.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause nausea, vomiting, and diarrhea.
Chronic Symptoms: 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

Toxicity

Ecology – General: Harmful to aquatic life with long lasting effects

<i>Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)</i>	
EC50 Daphnia 1	1.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence and Degradability

<i>Asphalt Cement (Modified)</i>	
Persistence and Degradability	Not established.

Bioaccumulative Potential

<i>Asphalt Cement (Modified)</i>	
Bioaccumulative Potential	Not established.

<i>Asphalt (8052-42-4)</i>	
BCF fish 1	(no bioaccumulation expected)
Log Pow	0.45 (at 25 °C)
<i>Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)</i>	
Log Pow	> 0.5 (at 20 °C)

Mobility in Soil

No additional information available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS


Waste treatment methods

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


Additional Information: Recycle the material as far as possible.

SECTION 14: TRANSPORT INFORMATION


In Accordance with DOT

<i>Proper Shipping Name</i>	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)	
<i>Hazard Class</i>	9	
<i>Identification Number</i>	UN3257	
<i>Label Codes</i>	9	
<i>Packing Group</i>	III	
<i>ERG Number</i>	128	

In Accordance with IMDG

<i>Proper Shipping Name</i>	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)	
<i>Hazard Class</i>	9	
<i>Identification Number</i>	UN3257	
<i>Packing Group</i>	III	
<i>Label Codes</i>	9	
<i>EmS-No. (Fire)</i>	F-A	
<i>EmS-No. (Spillage)</i>	S-P	

In Accordance with IATA

<i>Proper Shipping Name</i>	ELEVATED TEMPERATURE LIQUID, N.O.S. (Asphalt)	
<i>Packing Group</i>	III	
<i>Identification Number</i>	UN3257	
<i>Hazard Class</i>	9	
<i>Label Codes</i>	9	

ERG Number 9L

SECTION 15: REGULATORY INFORMATION
US Federal Regulations

<i>Asphalt (8052-42-4)</i>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<i>Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)</i>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<i>Superphosphoric acid (8017-16-1)</i>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

<i>Asphalt (8052-42-4)</i>
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
<i>Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)</i>
U.S. - Massachusetts - Right To Know List

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

<i>Revision Date</i>	12/14/2020
<i>Other Information</i>	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

<i>Aquatic Acute 2</i>	Hazardous to the aquatic environment - Acute Hazard Category 2
<i>Aquatic Acute 3</i>	Hazardous to the aquatic environment - Acute Hazard Category 3
<i>Carc. 1B</i>	Carcinogenicity Category 1B
<i>Eye Dam. 1</i>	Serious eye damage/eye irritation Category 1
<i>Met. Corr. 1</i>	Corrosive to metals Category 1
<i>Skin Corr. 1B</i>	Skin corrosion/irritation Category 1B
<i>H290</i>	May be corrosive to metals
<i>H314</i>	Causes severe skin burns and eye damage
<i>H318</i>	Causes serious eye damage
<i>H350</i>	May cause cancer
<i>H401</i>	Toxic to aquatic life
<i>H402</i>	Harmful to aquatic life

NFPA Health Hazard



2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA Fire Hazard

1 - Must be preheated before ignition can occur.

NFPA Reactivity

0 - Normally stable, even under fire exposure conditions, and are not reactive with water

HMIS III Rating

Health

2 - Moderate Hazard - Temporary or minor injury may occur

Flammability

1 - Slight Hazard

Physical

0 - Minimal Hazard

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)