

## Asphalt Cement, Crumb Rubber Modified

Date of Issue: 12/14/2020 Version: 1.2

### **SECTION 1: IDENTIFIFICATION**

**Product Identifier** 

Product Form: Mixture

Product Name: Asphalt Cement, Crumb Rubber Modified Synonyms: Asphalt Rubber, AR-10, AR-20, PCRM

**Intended Use of the Product** 

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

Maintenance Coatings such as Crack Fillers, Crack Retarders (SAM) or Chip Seals.

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)

Skin Irrit. 2 H315
Carc. 1B H350
Repr. 2 H361
STOT RE 1 H372
Aquatic Acute 3 H402
Aquatic Chronic 3 H412

Full text of H-phases: see Section 16

### **Label Elements**

**GHS-US Labeling** 

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) Dang

Hazard Statements (GHS-US) H317 - May cause an allergic skin reaction.

H350 - May cause cancer.

H361 - Suspected of damaging fertility or the unborn child.

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H372 - Causes damage to organs (adrenals, bone marrow, liver, lymph nodes, kidney, stomach, and thymus) through prolonged or repeated exposure.

H402 - Harmful to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

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.

P272 - Contaminated work clothing must not be allowed out of

the workplace.

P273 - Avoid release to the environment.

P280 - Wear eye protection, respiratory protection, protective

clothing, protective gloves.

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.

#### **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	93-79	Not classified
Crumb Rubber *	Not Listed	7-21	Not classified

Crumb Rubber may contain various amounts of the following: Naphthenic/Aromatic Extender Oil CAS # 64742-02-7, Carbon Black CAS # 1333-86-4, Talc CAS # 64742-02-7, Zinc Oxide CAS # 1314-13-2 or Sulfur CAS # 7704-34-9. Because this is derived from Recycled Tires and varies by source, type, etc., the actual % will vary significantly.

### **SECTION 4: FIRST AID MEASURES**

### **Description of First Aid Measures**

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*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. May cause an allergic skin reaction.

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 an allergic skin reaction. 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:* May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to adrenals, bone marrow, liver, lymph nodes, kidney, stomach, and thymus through prolonged or repeated exposure.

#### 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: 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

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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 firefighting 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. Do NOT breathe dust, vapor, mist, or spray. Keep away from open flames, hot surfaces and sources of ignition. No smoking.

### For Non-emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

#### **For Emergency Responders**

*Emergency Procedures:* 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: 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

Concerning disposal elimination after cleaning, see Section 13.

### **SECTION 7: HANDLING AND STORAGE**

### **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.

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

Storage Conditions: Keep in fireproof place.

Incompatible Materials: Heat sources.

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

### Specific End Use(s)

Binder component of Hot Mix Asphalt (Pavement).

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control Parameters**

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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).

(112), 61 65111 (122).		
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)
Hydrogen sulfide (7783-06-4)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	15 mg/m³
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**

Emergency eye wash fountains and safety showers should be **Appropriate Engineering Controls** 

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

**Hand Protection** 

Respiratory Protection

Skin and Body Protection

Wear suitable protective clothing.

If exposure limits are exceeded or irritation is experienced,

If material is hot, wear thermally resistant protective gloves.

With molten material wear thermally protective clothing.

approved respiratory protection should be worn.

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

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### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on Basic Physical and Chemical Properties**

Physical State Liquid Slurry **Appearance** Black semi-solid Odor No data available Odor Threshold No data available No data available рН **Evaporation Rate** No data available Melting Point No data available Freezing Point No data available **Boiling Point** No data available

Flash Point 270 - 330 °C (518 - 626 °F)

Auto-ignition Temperature

Decomposition Temperature

No data available

Relative Vapor Density at 20 °C

Relative Density

No data available

No data available

Specific Gravity 1.025 - 1.04 @15.6 °C (60 °F)

Solubility Insoluble

Partition Coefficient: N-Octanol/Water No data available

Viscosity 500 - 5000cP @175 °C (347 °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: Extremely high or low temperatures. Ignition sources. Incompatible materials. Incompatible Materials: Water, sparks, open flame, volatile liquids, strong acids, and H2S fumes.

Hazardous Decomposition Products: Thermal decomposition generates Sulfur oxides and Nitrogen oxides.

### **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

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Hydrogen sulfide (7783-06-4)		
LC50 Inhalation Rat	0.99 mg/l (Exposure time: 1 h)	
LC50 Inhalation Rat	444 ppm/4h	
Amine Anti-Strip		
ATE (Oral)	500.00 mg/kg body weight	
ATE (Dermal)	1,100.00 mg/kg body weight	
Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)		
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: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified Carcinogenicity: May cause cancer.

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

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

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: 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 an allergic skin reaction. 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:* May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to adrenals, bone marrow, liver, lymph nodes, kidney, stomach, and thymus through prolonged or repeated exposure.

### **SECTION 12: ECOLOGICAL INFORMATION**

### Toxicity

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

Hydrogen sulfide (7783-06-4)	
LC50 Fish 1	0.0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus

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	[flow-through])
LC 50 Fish 2	0.016 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
Extracts, petroleum, heavy paraffi	nic distillate solvent (64742-04-7)
EC50 Daphnia 1	1.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### Persistence and Degradability

No additional information available

### **Bioaccumulative Potential**

Asphalt (8052-42-4)		
BCF fish 1	(no bioaccumulation expected)	
Log Pow	> 6	
Hydrogen sulfide (7783-06-4)		
BCF fish 1	(no bioaccumulation expected)	
Log Pow	0.45 (at 25 °C)	

### **Mobility in Soil**

No additional information available

### **Other Adverse Effects**

No additional information available

### **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. Avoid release into environment.

### **SECTION 14: TRANSPORT INFORMATION**

### 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

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

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EmS-No. (Spillage) S-P



### **In Accordance with IATA**

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

Packing Group III

Identification Number UN3257

Hazard Class 9
Label Codes 9
ERG Number 9L



### **SECTION 15: REGULATORY INFORMATION**

### **US Federal Regulations**

Asphalt Cement (Unmodified, Neat)	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
Asphalt (8052-42-4)	
Listed on the United States TSCA (Toxic Substances Cont	rol Act) inventory
Hydrogen sulfide (7783-06-4)	
Listed on the United States TSCA (Toxic Substances Cont Listed on the United States SARA Section 302 Listed on United States SARA Section 313	rol Act) inventory
SARA Section 302 Threshold Planning Quantity (TPQ)	500
SARA Section 313 - Emission Reporting	1.0 %
Extracts, petroleum, heavy paraffinic distillate solvent (6-	4742-04-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### **US State Regulations**

### 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

### Hydrogen sulfide (7783-06-4)

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

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Extracts, petroleum, heavy paraffinic distillate solvent (64742-04-7)

U.S. - Massachusetts - Right To Know List

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

Revision Date 12/14/2020

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**

Acute Tox. 2 (Inhalation:gas) Acute toxicity (inhalation:gas) Category 2

Acute Tox. 4 (Dermal) Acute toxicity (dermal) Category 4

Acute Tox. 4 (Oral) Acute toxicity (oral) Category 4

Aquatic Acute 1 Hazardous to the aquatic environment - Acute Hazard Category 1

Aquatic Acute 2 Hazardous to the aquatic environment - Acute Hazard Category 2

Aquatic Acute 3 Hazardous to the aquatic environment - Acute Hazard Category 3

Aquatic Chronic 1 Hazardous to the aquatic environment - Chronic Hazard Category 1

Aquatic Chronic 3 Hazardous to the aquatic environment - Chronic Hazard Category 3

Carc. 1B Carcinogenicity Category 1B

Eye Dam. 1 Serious eye damage/eye irritation Category 1
Eye Irrit. 2A Serious eye damage/eye irritation Category 2A

Flam. Gas 1 Flammable gases Category 1

Liquefied gas

Repr. 2

Skin Corr. 1B

Gases under pressure Liquefied gas

Reproductive toxicity Category 2

Skin corrosion/irritation Category 1B

Skin Sens. 1 Skin sensitization Category 1
Skin Sens. 1A Skin sensitization Category 1A

STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3 Specific target organ toxicity (single exposure) Category 3

H220 Extremely flammable gas

H280 Contains gas under pressure; may explode if heated

H302 Harmful if swallowed

H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H318 Causes serious eye damageH319 Causes serious eye irritation

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H330	Fatal if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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)

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