



## Section 1 - Product and Company Identification

**Material Name** • CSS-1H Asphalt Emulsion  
**Chemical Category** • Mixture  
**Product Description** • Asphalt emulsion  
**Product Use** • asphalt pavements  
**Synonyms** • Low VOC Water Based Asphalt Emulsion  
**Manufacturer** • Gardner Asphalt Supply  
4161 E. 7th Avenue  
Tampa, FL 33605  
United States

### Telephone

**Technical** • 813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time  
**Emergency** • 800-424-9300 - CHEMTREC  
**Emergency** • 703-527-3887 - CHEMTREC (Outside US)

**Last Revision Date** • 3/11/2019

## Section 2 - Hazards Identification

**Signal Word: WARNING!**

### Precautions and Hazards

*Contains Petroleum Based Products. Keep away from heat, sparks, and open flame. Although unlikely with cool asphalt products, vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN SULFIDE (H2S) can be harmful or fatal if inhaled. Use only with adequate ventilation. Avoid prolonged breathing of vapor or spray mist. Keep product closed and properly stored when not in use. Avoid contact with skin. Use protective gloves, safety glasses, and protective clothing when using this product. Do not use in drinking water or food systems. Make sure material is sealed and secured during transportation. Do not eat or drink while using this product and wash hand thoroughly after use.*

**Prevention** Do not breathe fume, gas, mist, vapors and/or spray. Do not handle until all safety precautions have been read and understood.

**Response** IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.



**Physical Form** • Liquid  
**Color** • Black  
**Odor** • Mild Hydrocarbon.  
**Flash Point** • 460°F  
**OSHA(HCS2012)GHS** • Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A,

Carcinogenicity - Category 1A (Asphalt Fumes – High Temperature, Heated Product – not expected with cold asphalt product applications )

## Potential Health Effects

### Inhalation

**Acute (Immediate)** • May cause irritation. Vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN SULFIDE (H<sub>2</sub>S) can be harmful or fatal if inhaled.

**Chronic (Delayed)** • No data available

### Skin

**Acute (Immediate)** • May cause irritation.

**Chronic (Delayed)** • Repeated and prolonged exposure may cause dermatitis.

### Eye

**Acute (Immediate)** • May cause burning and redness or swelling of the eyes. May cause irritation.

**Chronic (Delayed)** • Repeated and prolonged exposure may cause irritation.

### Ingestion

**Acute (Immediate)** • May be harmful or fatal if swallowed.

**Chronic (Delayed)** • No data available

**Carcinogenic Effects** • See Section 11 - Toxicological Information.

Carcinogenic Effects			
	CAS	IARC	NTP
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Under Consideration

**Other Information** • This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding. During spraying or sanding the product, wear suitable respiratory equipment to protect against inhalation of mist and dust.

See Section 12 for Ecological Information.

## Section 3 - Composition/Information on Ingredients

Composition						
Chemical Name	Identifiers	%	Hazardous	LD50/LC50	Classifications According to Regulation/Directive	Comments
Water	CAS:7732-18-5	20% TO 45%	No	Ingestion/Oral-Rat LD50 • >90 mL/kg		NDA
Asphalt	CAS:8052-42-4 UN:NA1999	50% TO 65%	Yes	Ingestion/Oral-Rat LD50 • >5000 mg/kg Inhalation-Rat LC50 • >94.4 mg/m <sup>3</sup>	UN GHS: Skin Irrit. 2; Eye Irrit. 2A; Carc. 1A	NDA
Acid Adjuster Emulsifier	CAS:7647-01-0 EC Number:231- 595-7 UN:UN1789 (hydrochloric acid)	< 5%	Yes	Inhalation-Rat LC50 • 45000 mg/m <sup>3</sup> 5 Minute(s)		NDA

This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

See Section 11 for Toxicological Information.

## Section 4 - First Aid Measures

**Inhalation** • Remove to fresh air. Call a physician or poison control center. If not breathing, give artificial respiration.

- Skin** • Wash the contaminated area of body with soap and fresh water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Eye** • Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.
- Ingestion** • Call a physician or poison control center immediately. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting.

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See Section 2 for Potential Health Effects.

## Section 5 - Fire Fighting Measures

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- Extinguishing Media** • LARGE FIRE: Water spray, fog or regular foam.  
SMALL FIRES: Dry chemical or CO2.
- Unsuitable Extinguishing Media** • Do not spray water jet stream at burning material. This action can splatter burning asphaltic material and spread fire. This product is not expected to burn based on the water content.
- Firefighting Procedures** • Keep unauthorized personnel away. Stay upwind. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.
- Unusual Fire and Explosion Hazards** • Some of these materials may burn, but none ignite readily. May release irritating or toxic gases, fumes, or vapors.
- Hazardous Combustion Products** • Carbon monoxide, carbon dioxide, hydrocarbons.
- Protection of Firefighters** • Wear positive pressure self-contained breathing apparatus (SCBA).
- Flash Point** • 460°F
- Explosion Limits**
- Upper** • No data available
- Lower** • No data available
- Autoignition Temperature** • No data available

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## Section 6 - Accidental Release Measures

- Personal Precautions** • Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. If you have not donned special protective clothing approved for this material, do not expose yourself to any risk of this material touching you. Ventilate enclosed areas.
- Emergency Procedures** • Stop leak if you can do it without risk. Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up.
- Environmental Precautions** • Avoid run off to waterways and sewers. Do NOT wash away into sewer.
- Containment/Clean-up Measures** • Use appropriate Personal Protective Equipment (PPE) Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container.
- Prohibited Materials** • Avoid contact with strong oxidizing agents and acids.

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## Section 7 - Handling and Storage

- Handling** • Keep containers tightly closed when not in use. Use only with adequate ventilation. Avoid vapors from heated product to prevent exposure to toxic and irritating fumes. Hydrogen Sulfide may be released this material is heated. Material not recommended for heating.
- Storage** • Keep only in the original container/package in a cool well-ventilated place. Keep away from fire. Keep container closed when not in use.
- Special Packaging** • No data available

## Materials

### Incompatible

- Avoid contact with strong oxidizing agents and acids.

### Materials or Ignition

### Sources

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

#### Pictograms



#### Respiratory

- When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator. This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.

#### Eye/Face

- Wear ANSI approved safety glasses with side shields or safety goggles. Face Shield may be required in application where splashing product is a potential.

#### Hands

- Wear chemical protective gloves made of Nitrile or Neoprene.

#### Skin/Body

- Wear clothing that covers the skin to prevent skin exposure.

#### General Industrial Hygiene

- Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke during work. Wash hands before eating.

#### Considerations

#### Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Exposure Limits/Guidelines				
	Result	ACGIH	Canada Ontario	United States - California
Asphalt (8052-42-4)	TWAs	0.5 mg/m <sup>3</sup> TWA (fume, inhalable fraction, as benzene soluble aerosol)	0.5 mg/m <sup>3</sup> TWA (fume, inhalable, as Benzene-soluble aerosol)	5 mg/m <sup>3</sup> PEL (fume)

### Exposure Control Notations

#### ACGIH

- Asphalt (8052-42-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free))

#### Key to abbreviations

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

## Section 9 - Physical and Chemical Properties

### Material Description

Physical Form	Liquid	Appearance/Description	Thick black semi-liquid.
Color	Black	Odor	Mild Hydrocarbon.
Physical and Chemical Properties	No data available		

### General Properties

Boiling Point	212 F(100 C)	Melting Point	60 F(15.5556 C)
pH	2 to 5	Specific Gravity/Relative Density	= 1.16
Density	8.49 lbs/gal	Water Solubility	No data available
Viscosity	No data available		

### Volatility

Vapor Pressure	No data available	Vapor Density	> 1 Air=1
Evaporation Rate	< 1 Water = 1	VOC (Vol.)	< 5 g/L

### Flammability

Flash Point	460 F(237.7778 C)	UEL	No data available
LEL	No data available	Autoignition	No data available

Self-Accelerating Decomposition Temperature (SADT)	No data available		
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## Section 10 - Stability and Reactivity

<b>Stability</b>	• Stable under normal temperatures and pressures.
<b>Hazardous Polymerization</b>	• Hazardous polymerization not indicated.
<b>Conditions to Avoid</b>	• Avoid contact with strong oxidizing agents and acids.
<b>Incompatible Materials</b>	• Strong oxidizers and acids.
<b>Hazardous Decomposition Products</b>	• Carbon monoxide, carbon dioxide and hydrocarbons.
<b>Other Information</b>	• No data.

## Section 11 - Toxicological Information

Components		
Water (20% TO 45%)	7732-18-5	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • >90 mL/kg
Asphalt (50% TO 65%)	8052-42-4	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • >5000 mg/kg; <i>Gastrointestinal:Hypermotility, diarrhea</i> ; Inhalation-Rat LC50 • >94.4 mg/m <sup>3</sup> ; <b>Multi-dose Toxicity:</b> Inhalation-Human TDLo • 10 mg/m <sup>3</sup> 5.5 Year(s)-Intermittent; <i>Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Cough; Gastrointestinal:Changes in structure or function of salivary glands;</i> <b>Tumorigen / Carcinogen:</b> Skin-Mouse TDLo • 905 g/kg 2 Year(s)-Intermittent; <i>Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Skin and Appendages:Other:Tumors</i>

<b>Other Information</b>	• This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation in recent studies. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.
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## Section 12 - Ecological Information

<b>Ecological Fate</b>	• No data available.
<b>Persistence/Degradability</b>	• No data available.
<b>Bioaccumulation Potential</b>	• No data available.
<b>Mobility in Soil</b>	• No data available.

## Section 13 - Disposal Considerations

**Product** • Dispose of content in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transportation Information

**DOT - United States - Department of Transportation**  
Shipping Name: Not Regulated

**TDG - Canada - Transport of Dangerous Goods**  
Shipping Name: Not Regulated

## Section 15 - Regulatory Information

**SARA Hazard Classifications** • Acute, Chronic

**Risk & Safety Phrases** • California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

State Right To Know				
Component	CAS	MA	MN	NJ
Asphalt	8052-42-4	Yes	Yes	Yes
Water	7732-18-5	No	No	No

Inventory			
Component	CAS	EU EINECS	TSCA
Asphalt	8052-42-4	Yes	Yes
Water	7732-18-5	Yes	Yes

### Canada

#### Labor

**Canada - WHMIS - Classifications of Substances**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Uncontrolled product according to WHMIS classification criteria

### United States

#### Environment

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

**U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

**U.S. - CWA (Clean Water Act) - Reportable Quantities of Designated Hazardous Substances**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

### United States - California

#### Labor

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

- Asphalt 8052-42-4 (Petroleum fumes, includes any liquids or products that could give rise to fumes under normal conditions)
- Water 7732-18-5 Not Listed

#### Environment

**U.S. - California - Proposition 65 - Carcinogens List**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

### United States - Delaware

#### Environment

**U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

**U.S. - Delaware - Accidental Release Prevention Regulations - Threshold Quantities**

- Asphalt 8052-42-4 Not Listed
- Water 7732-18-5 Not Listed

**U.S. - Delaware - Accidental Release Prevention Regulations - Toxic Endpoints**

•Asphalt 8052-42-4 Not Listed

•Water 7732-18-5 Not Listed

**U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities**

•Asphalt 8052-42-4 Not Listed

•Water 7732-18-5 Not Listed

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## Section 16 - Other Information

**Last Revision Date** • 1/26/2017

**Disclaimer/Statement of Liability** • This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to verify the suitability and completeness of such information for particular use. Gardner-Gibson does not accept liability for any loss or damage that may occur from the use of this information.

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**NFPA:**

