# SAFETY DATA SHEET

This safety data sheet complies with the requirements of: 29CFR1910.1200

**Issue Date** 12-Jul-2018 **Revision Date** 20-Dec-2018 **Version** 3

**Product identifier**

**Product Name** Asphalt Emulsion

**Other means of identification**

**Product Code** LUCAS 721
**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Roof Coating. An economical means of recoating and preserving smooth-surface asphalt roofs.
**Uses advised against** For exterior use only. Do not use indoors.

**Details of the supplier of the safety data sheet**

Manufacturer Address R.M. Lucas Company
3211 South Wood Street
Chicago, Illnois 60608
(773) 523-4300

**Emergency telephone number**

**Emergency Telephone** Call CHEMTREC Day or Night:
Within USA and Canada: 1-800 424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label elements**

**Emergency Overview**

**Appearance** Viscous **Physical state** Liquid **Odor** Low

**Precautionary Statements - Disposal**
Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

**Hazards not otherwise classified (HNOC)**
Not applicable

**Other Information**
• May be harmful in contact with skin
Unknown acute toxicity 51.89% of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

**Mixture**
This product is a mixture.
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Common name** Asphalt Emulsion Roof Coating.
**Synonyms** None.
**Chemical nature** Aqueous solution.

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---|---|---|---|
| Water | 7732-18-5 | 40 - 50% | * |
| Asphalt (at Ambient Temperature) | 8052-42-4 | 40 - 50% | * |
| Bentonite | 1302-78-9 | 0 - 10% | * |
| Fiber Glass | 65997-17-3 | 0 - 10% | * |

## 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice** Under conditions of normal use, no hazards are anticipated which require special first aid measures.

**Eye contact** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin contact** Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.

**Inhalation** Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with breathing is experienced, get medical attention immediately.

**Ingestion** Not an expected route of exposure. If swallowed, do not induce vomiting. Get medical attention immediately.

**Self-protection of the first aider** First aider: Pay attention to self-protection!.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause skin irritation. May cause eye irritation.

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

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO2). Sand. Use foam or water FOG as a last resort.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**
No information available.

**Hazardous combustion products** Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

**Explosion data**
**Sensitivity to Mechanical Impact** Not sensitive.
**Sensitivity to Static Discharge** Not sensitive.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** No action should be taken involving any personal risk or without suitable training. Use personal protective equipment as required.

**Other Information** Extremely slippery when spilled.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering sewers, drains, or waterways. Local authorities should be advised if significant spillages can not be contained. See Section 12 for additional ecological information.

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

**Methods for containment** Contain spillage with non-combustible absorbent material, e.g. sand, earth, diatomaceous earth, vermiculite.

**Methods for cleaning up** Pick up the absorbed material (described just above) and transfer to properly labeled containers for disposal according to local / national regulations (see Section 13).

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Use personal protective equipment as required. Use only outdoors.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep from freezing. Keep containers tightly closed in a cool, dry, well-ventilated place.

**Incompatible materials** Strong acids. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** .

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Asphalt (at Ambient Temperature)<br>8052-42-4 | TWA: 0.5 mg/m³ benzene-soluble aerosol fume, inhalable particulate matter | - | Ceiling: 5 mg/m³ fume 15 min |
| Bentonite<br>1302-78-9 | TWA: 1 mg/m³ respirable particulate matter | - | - |
| Fiber Glass<br>65997-17-3 | TWA: 1 fiber/cm3 respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination<br>TWA: 5 mg/m³ inhalable particulate matter | - | - |

**Appropriate engineering controls**

**Engineering Controls** None under normal outdoor use conditions.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing that is resistant to chemical penetration.

**Respiratory protection** No protective equipment is needed under normal use conditions.

**General Hygiene Considerations** Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | | | |
|---|---|---|---|
| **Physical state** | Liquid | | |
| **Appearance** | Viscous | **Odor** | Low |
| **Color** | Black | **Odor threshold** | Negligible odor. |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | Not applicable | |
| **Melting point/freezing point** | N/A / 0 °C N/A / 32 °F | Melting Point is not applicable. Freezing points are shown. |
| **Boiling point / boiling range** | > 100 °C / 212 °F | |
| **Flash point** | N/A °C / N/A °F | Non Flammable |
| **Evaporation rate** | The evaporation rate of the water component of this emulsion product is dependent upon: 1) The temperature of the water at the air-water surface; 2) The humidity of the air; 3) The area of the air-water surface; 4) The temperature of the air. No information available | No data available. Evaporation rate is dependent upon atmospheric conditions. |
| **Flammability (solid, gas)** | Non Flammable | |
| **Flammability Limit in Air** | | Not flammable |
| **Upper flammability limit:** | Not applicable | |
| **Lower flammability limit:** | Not applicable | |
| **Vapor pressure** | 2.33 (kPa) | @ 20 °C |
| **Vapor density** | 5.3 | Where: Air = 1 at 68 degrees F (20 degrees C) |
| **Specific Gravity** | 1.06 | Water = 1g/ml |
| **Water solubility** | Dispersible | |
| **Solubility in other solvents** | Soluble in aromatic and aliphatic solvents. | |
| **Partition coefficient** | No information available | No data available. |
| **Autoignition temperature** | 330 °C / 626 °F | |
| **Decomposition temperature** | No information available | |
| **Kinematic viscosity** | No information available | |
| **Dynamic viscosity** | No information available | |
| **Explosive properties** | Not an explosive | |
| **Oxidizing properties** | None | |

**Other Information**

| | |
|---|---|
| **Softening point** | Not applicable |
| **Molecular weight** | No information available |
| **VOC Content (%)** | Less than 50 g/l |
| **Density** | 8.6 to 8.9 lb/gal |
| **Bulk density** | Not applicable |

## 10. STABILITY AND REACTIVITY

**Reactivity**
Not applicable Not applicable

**Chemical stability**
Stable.

**Possibility of Hazardous Reactions**
None under normal use.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid**
None known for product as a whole.

**Incompatible materials**
Strong acids. Strong oxidizing agents.

**Hazardous Decomposition Products**
Combustion may produce carbon monoxide, carbon dioxide, and other asphyxiants.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information** Toxicological testing has not been conducted for this product overall. Available toxicological data for individualingredients are summarized below.

**Inhalation** Avoid breathing vapors or mists.

**Eye contact** Avoid contact with eyes. Contact with eyes may cause irritation.

**Skin contact** May cause irritation.

**Ingestion** If swallowed, do not induce vomiting. Get medical attention immediately. Not an expected route of exposure.

**Component Information** * The IARC Monograph (Vol. 103, 2013, Bitumen and Bitumen Emissions) defines Asphalt as 'Group 2B, Possible Carcinogen to Humans'. This definition is based on studies of exposure to Asphalt fumes at elevated temperatures. The Monograph states that temperature plays an important role in determining the degree of exposure and also the carcinogenic potential of bitumen emissions. This same Monograph states that Asphalt is non volatile at ambient temperature. There is no data presented in the Monograph to demonstrate that Asphalt at ambient temperature is considered a carcinogen. Since the normal use of this product is at ambient temperature, the Asphalt used in this product is not listed as a carcinogen. No other national or international agency has defined Asphalt as a carcinogen.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Water<br>7732-18-5 | > 90 mL/kg ( Rat ) | - | - |
| Asphalt (at Ambient Temperature)<br>8052-42-4 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 94.4 mg/m$^3$ ( Rat ) 4.5 h |
| Bentonite<br>1302-78-9 | > 5000 mg/kg ( Rat ) | - | - |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Can cause skin irritation.
**Serious eye damage/eye irritation** Irritating to eyes.
**Irritation** Irritating to eyes and skin.
**Corrosivity** Not classified.
**Sensitization** May cause sensitization of susceptible persons.
**Germ cell mutagenicity** This product does not contain any ingredients that cause germ cell mutagenicity.
**Carcinogenicity** The table below indicates whether each agency (ACGIH, IARC, NTP, or OSHA) has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Fiber Glass<br>65997-17-3 | - | Group 3 | - | - |

**Legend**
**Reproductive toxicity** None known for product as a whole.
**Developmental Toxicity** None known for product as a whole.
**Teratogenicity** None known.
**STOT - single exposure** No information available.
**STOT - repeated exposure** No information available.
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**The following values are calculated based on chapter 3.1 of the GHS document** For exterior use only. Do not use indoors.

**ATEmix (oral)** 9,988.00
**ATEmix (dermal)** 4,341.80

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

0.78 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|---|---|---|
| Bentonite<br>1302-78-9 | - | 19000: 96 h Oncorhynchus mykiss mg/L LC50 static 8.0 - 19.0: 96 h Salmo gairdneri g/L LC50 | - |

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

| Chemical Name | Partition coefficient |
|---|---|
| Asphalt (at Ambient Temperature)<br>8052-42-4 | >6 |

**Other adverse effects** No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

**Contaminated packaging** Do not reuse container.

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| **Note:** | This material is not subject to regulation as a hazardous material for shipping |
| **DOT** | Not regulated. |
| **TDG** | Not regulated. |
| **MEX** | Not regulated. |
| **ICAO (air)** | Not regulated. |
| **IATA** | Not regulated. |
| **IMDG** | Not regulated. |
| **RID** | Not applicable in the United States. Not regulated. |
| **ADR** | Not applicable in the United States. Not regulated. |
| **ADN** | Not applicable in the United States. Not regulated. |

## 15. REGULATORY INFORMATION

### International Inventories

| | |
|---|---|
| **TSCA** | All of the components of this product are listed on the US TSCA (Toxic Substances Control Act) Inventory or are exempt. |
| **DSL/NDSL** | All of the components of this product are listed on the DSL. |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**IECSC** - China Inventory of Existing Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute health hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire hazard** | No |
| **Sudden release of pressure hazard** | No |
| **Reactive Hazard** | No |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

### US State Regulations

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Water<br>7732-18-5 | - | - | X |
| Asphalt (at Ambient Temperature)<br>8052-42-4 | X | X | X |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

## 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health hazards** 1 | **Flammability** 1 | **Instability** 0 | **Physical and Chemical Properties** - |
| **HMIS** | **Health hazards** 1 | **Flammability** 1 | **Physical hazards** 0 | **Personal protection** - |

**Prepared By** Prepared by Adam Dunn
**Issue Date** 12-Jul-2018
**Revision Date** 20-Dec-2018
**Revision Note**
No information available

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**