



SAFETY DATA SHEET

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

Issue Date 08-May-2015

Revision Date 27-May-2015

Version 1

Product identifier

Product Name Fibrated Asphalt Roof Coating

Other means of identification

Product Code LUCAS 724

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. This product is not intended for use over tar or asphalt and gravel roofs.

Details of the supplier of the safety data sheet

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

Emergency telephone number

Emergency Telephone Call CHEMTREC Day or Night:
Within USA and Canada: 1-800 424-9300
Outside USA and Canada: 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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


| | |
|--|-------------|
| Carcinogenicity | Category 1A |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Aspiration toxicity | Category 1 |
| Flammable liquids | Category 3 |

Label elements

Emergency Overview

Danger

Hazard statements
 May cause cancer
 Causes damage to organs through prolonged or repeated exposure
 May be fatal if swallowed and enters airways
 Flammable liquid and vapor



Appearance Viscous**Physical state** Liquid**Odor** Solvent (Mineral Spirits)**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Keep away from heat/sparks/open flames/hot surfaces.
 Keep container tightly closed when product is not in use.
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep cool

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 17.478635% 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 Roof Coating.
Synonyms None.
Chemical nature Organic solvents and additives.

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|---|------------|----------|--------------|
| Asphalt (at Ambient Temperature) | 8052-42-4 | 50 - 60% | * |
| Mineral Spirits (with < 0.1% Benzene) | 8052-41-3 | 20 - 30% | * |
| Calcium Carbonate | 1317-65-3 | 0 - 10% | * |
| Hydrated Aluminum-Magnesium Silicate (Attapulgite) | 12174-11-7 | 0 - 10% | * |
| Cellulose Fiber | 9004-34-6 | 0 - 10% | * |
| Nonane | 111-84-2 | 0 - 10% | * |
| Quartz | 14808-60-7 | 0 - 10% | * |

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---|--|
| General advice | Contains petroleum distillate. Harmful or fatal if swallowed. Vapor harmful. May affect the brain or central nervous system causing dizziness, headache, or nausea. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. |
| 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

Sealed container may rupture/burst when heated or exposed to excessive heat.

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 May be ignited by heat, sparks or flames.

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 Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

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. Remove all sources of ignition. Use only outdoors.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, dry, well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition.

Incompatible materials Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines No ACGIH or OSHA PEL is assigned to this mixture. Exposure limits for the component materials are shown below. This product, as supplied, is not believed to contain any hazardous material that exceeds exposure limits established by OSHA.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--|---|--|---|
| Asphalt (at Ambient Temperature) 8052-42-4 | TWA: 0.5 mg/m ³ benzene soluble aerosol fume, inhalable fraction | - | Ceiling: 5 mg/m ³ fume 15 min |
| Mineral Spirits (with < 0.1% Benzene) 8052-41-3 | TWA: 100 ppm | TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³ | IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min TWA: 350 mg/m ³ |
| Calcium Carbonate 1317-65-3 | - | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust |
| Hydrated Aluminum-Magnesium Silicate (Attapulgite) 12174-11-7 | TWA: 1 mg/m ³ respirable fraction | - | - |
| Cellulose Fiber 9004-34-6 | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ (vacated) STEL: 10 mg/m ³ | TWA: 1 mg/m ³ |
| Nonane 111-84-2 | TWA: 200 ppm | (vacated) TWA: 200 ppm (vacated) TWA: 1050 mg/m ³ | TWA: 200 ppm TWA: 1050 mg/m ³ |

| | | | |
|----------------------|--|--|---|
| Quartz 14808-60-7 | TWA: 0.025 mg/m ³ respirable fraction | (vacated) TWA: 0.1 mg/m ³ respirable dust : (30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction | IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust |
|----------------------|--|--|---|

Appropriate engineering controls

Engineering Controls Use natural cross ventilation, local (mechanical) pick-up, and/or general area mechanical cross ventilation. Ventilation pattern should be designed to prevent accumulation of asphalt vapors. Ventilation must be sufficient to maintain asphalt vapor concentrations below the TWA limits outlined above.

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

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

| | |
|--|--|
| <p>Physical state Liquid Appearance Viscous Color Black</p> | <p>Odor Solvent (Mineral Spirits) Odor threshold 1-30 PPM. Odor thresholds vary greatly. Do not rely on odor threshold alone to determine potentially hazardous substances.</p> |
|--|--|

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------------|---|---|
| pH | Not applicable | |
| Melting point/freezing point | None / -70 °C None / -94 °F | Melting Point is not applicable. Freezing points are shown. |
| Boiling point / boiling range | > 154 °C / 310 °F | |
| Flash point | > 40.5 °C / > 105 °F | Setaflash |
| Evaporation rate | 0.1 | Butly acetate = 1 |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | Flammable above 105 degrees F and 40.5 degrees C. |
| Upper flammability limit: | 7.0 | |
| Lower flammability limit: | 1.6 | |
| Vapor pressure | 0.3 (kPa) | @ 20 °C |
| Vapor density | 5.3 | Where: Air = 1 at 68 degrees F (20 degrees C) |
| Specific Gravity | 0.98 | Water = 1g/ml |
| Water solubility | Insoluble | |
| 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 | |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|-------------------------|--------------------------------------|
| Asphalt (at Ambient Temperature) 8052-42-4 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | - |
| Cellulose Fiber 9004-34-6 | > 5 g/kg (Rat) | > 2 g/kg (Rabbit) | > 5800 mg/m ³ (Rat) 4 h |
| Nonane 111-84-2 | - | - | = 3200 ppm (Rat) 4 h |
| Quartz 14808-60-7 | = 500 mg/kg (Rat) | - | - |

Information on toxicological effects

Symptoms Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

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, respiratory system 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 |
|--|-------|---------------------|-------|------|
| Hydrated Aluminum-Magnesium Silicate (Attapulgite) 12174-11-7 | - | Group 2B Group 3 | - | X |
| Quartz 14808-60-7 | A2 | Group 1 | Known | X |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
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 a human carcinogen.
NTP (National Toxicology Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity None known.
Developmental Toxicity None known.
Teratogenicity None known.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - No information available

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

ATEmix (oral) 6,968.00
ATEmix (dermal) 2,787.00

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The following table lists information related to aquatic toxicity

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|---|-----------------------|
| Asphalt (at Ambient Temperature) 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

DOT Regulated
DOT Ground: Not regulated if shipped in containers < 119 gallons (450 liters).
DOT Ground: Regulated if shipped in containers >119 gallons (450 liters).

Proper shipping name Combustible liquid, n.o.s (mineral spirits)
Hazard Class 3
Packing Group III

TDG
UN/ID no. NA 1993
Proper shipping name Combustible liquid, n.o.s (mineral spirits)
Hazard Class 3
Packing Group III

MEX Regulated
UN/ID no. NA 1993
Proper shipping name Combustible liquid, n.o.s. (mineral spirits)

ICAO (air) Regulated
UN/ID no. 1993

IATA Regulated
UN/ID no. 1993

IMDG Regulated
UN/ID no. 1993

RID Not applicable in the United States.

ADR Not applicable in the United States.

ADN Not applicable in the United States.

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 | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | Yes |
| 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 contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|--|---------------------------|
| Hydrated Aluminum-Magnesium Silicate (Attapulgit) - 12174-11-7 | Carcinogen |
| Quartz - 14808-60-7 | Carcinogen |

U.S. State Right-to-Know Regulations

This product contains the following substances regulated by various State Right-to-Know regulations.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| Asphalt (at Ambient Temperature) 8052-42-4 | X | X | X |
| Mineral Spirits (with < 0.1% Benzene) 8052-41-3 | X | X | X |
| Calcium Carbonate 1317-65-3 | X | X | X |
| Cellulose Fiber 9004-34-6 | X | X | X |
| Nonane 111-84-2 | X | X | X |
| Quartz 14808-60-7 | 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

| | | | | |
|-----------------------------------|----------------------------------|----------------|--------------------|------------------------------------|
| <u>NFPA</u> | Health hazards 2 | Flammability 2 | Instability 0 | Physical and Chemical Properties - |
| <u>HMIS</u> | Health hazards 2 | Flammability 2 | Physical hazards 0 | Personal protection - |
| <i>Chronic Hazard Star Legend</i> | <i>* = Chronic Health Hazard</i> | | | |

| | |
|----------------------|--------------------------|
| Prepared By | Prepared by Robert Barry |
| Issue Date | 08-May-2015 |
| Revision Date | 27-May-2015 |
| 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