

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 11/09/2016 Date of Issue: 11/09/2016

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier Product Form: Mixture Product Name: LTBC

1.2. Intended Use of the Product Use of the Substance/Mixture: Tack Coat

1.3. Name, Address, and Telephone of the Responsible Party

Company

Russell Standard / Hammaker East

285 Kappa Drive

Suite 300 Pittsburgh, PA 15238 T: (800) 323-3053

www.russellstandard.com

1.4. Emergency Telephone Number

Emergency Number : (800) 323-3053 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Skin Sens. 1 H317 Carc. 2 H351

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Warning

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

H351 - Suspected of causing cancer.

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing vapors, mist, or spray.

P272 - Contaminated work clothing must not be allowed out of the workplace.

 $\ensuremath{\mathsf{P280}}$ - Wear protective gloves, protective clothing, and eye protection.

P302+P352 - If on skin: Wash with plenty of water.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P321 - Specific treatment (see section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national,

and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. May defat skin and cause contact dermatitis. May contain 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. Product may contain low levels of 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.

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2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product Identifier | % | GHS-US classification |
|-----------------------------|----------------------|----------|--|
| Asphalt | (CAS No) 8052-42-4 | 50 - 65 | Carc. 2, H351 |
| Water | (CAS No) 7732-18-5 | 35 - 50 | Not classified |
| Latex Polymer Mixture | (CAS No) Proprietary | <= 6 | Not classified |
| Emulsifier and Lignin Amine | (CAS No) Proprietary | 0.05 - 2 | Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 |

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200]

SECTION 4: FIRST AID MEASURES

4.1. 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: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: In solid form: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. In molten form: Cool skin rapidly with cold water after contact with molten product. Removal of solidified molten material from skin requires medical assistance.

First-aid Measures After Eye Contact: In solid form: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. In molten form: Removal of solidified molten material from the eyes requires medical assistance.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Skin sensitization. Suspected of causing cancer. Risk of thermal burns on contact with molten product. **Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation. May cause irritation of the respiratory tract and the other mucous membranes. Toxic and harmful fumes may be generated from heating asphalt: Inhalation of fumes may cause dizziness and/or irritation to the eyes, nose, and throat. Irritating and toxic hydrogen sulfide gas may be released. Hydrogen sulfide is a fatal and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. 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: May cause slight irritation to eyes. Risk of thermal burns on contact with molten product. **Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Suspected of causing cancer.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. 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.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical powder. Earth. Sand.

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Unsuitable Extinguishing Media: Do not use water when molten material is involved, contact of hot product with water will result in a violent expansion as the water turns to steam causing explosion with massive force. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

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. Liquid asphalt may react in contact with strong oxidizers to pose a fire/explosion hazard.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions closed containers may rupture or explode.

Firefighting Instructions: Remove containers from fire area if this can be done without risk. Do not get water inside containers. Do not apply water stream directly at source of leak. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Thermal decomposition generates: Carbon oxides (CO, CO₂). Hydrocarbons. Sulfur oxides.

Hydrogen sulfide. Amines. Hydrogen chloride. Halogenated compounds. Styrene. Irritating fumes.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Ventilate area. 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. Avoid generation of dust during clean-up of spills. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Risk of thermal burns on contact with molten product. Asphalt contains sulfur, may release small amounts of hydrogen sulfide. Hydrogen sulfide is a highly flammable, explosive gas under certain conditions, is a toxic gas, and may be fatal. Gas can accumulate in the headspace of closed containers, use caution when opening sealed containers. Heating the product or containers can cause thermal decomposition of the product and release hydrogen sulfide.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe mist, spray, and vapors.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Hot asphalt can release toxic Hydrogen Sulfide gas. Hydrogen Sulfide can accumulate in vapor space of tanks and vessels during transfer and storage of this material.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Protect from freezing.

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Incompatible Products: Strong acids, strong bases, strong oxidizers. Chlorine. Chlorates. Permanganates. Halogenated compounds. Nitrates. When molten: water.

7.3. Specific End Use(s)

Tack Coat

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. 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), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

| Asphalt (8052-42-4) | | |
|---------------------|-----------------------------------|--|
| USA ACGIH | ACGIH TWA (mg/m³) | 0.5 mg/m³ (fume, inhalable particulate matter) |
| USA ACGIH | ACGIH chemical category | Not Classifiable as a Human Carcinogen fume, coal tar-free |
| USA ACGIH | Biological Exposure Indices (BEI) | Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - |
| | | Sampling time: end of shift at end of workweek (nonquantitative) |
| USA NIOSH | NIOSH REL (ceiling) (mg/m³) | 5 mg/m³ (fume) |

8.2. Exposure Controls

Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when flammable gases or vapors may be released. Storage and handling temperatures should be kept as low as feasible to minimize fume production. Do not enter empty storage tanks until measurements of hydrogen sulfide concentration and available oxygen have been carried out. Ensure all national/local regulations are observed.

Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing

Hand Protection

Eye Protection

Skin and Body Protection

Respiratory Protection

: Chemically resistant materials and fabrics.

: Wear protective gloves.

: Chemical safety goggles.

: Wear suitable protective clothing.

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Thermal Hazard Protection

Environmental Exposure Controls

Other Information

: When working with hot material, use suitable thermally protective clothing.

: Avoid release to the environment.

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Black/Brown
Odor : Asphalt
Odor Threshold : No data avail

Odor Threshold No data available : No data available pН **Evaporation Rate** : No data available **Melting Point** No data available **Freezing Point** : No data available **Boiling Point** : 212 °F (100 °C) **Flash Point** : No data available **Auto-ignition Temperature** : No data available **Decomposition Temperature** No data available Flammability (solid, gas) : No data available

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Vapor Pressure: No data availableRelative Vapor Density at 20°C: No data availableRelative Density: No data availableSpecific Gravity: 0.9 - 1.1Specific Gravity / Density: 7.5 - 9.2 lb/galSolubility: No data availablePartition Coefficient: N-Octanol/Water: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions. Liquid asphalt may react in contact with strong oxidizers to pose a fire/explosion hazard.

: 20 - 100 SFS

- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- **10.3.** Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Chlorine. Permanganates. Chlorates. Halogenated compounds. Nitrates. When molten: water.
- **10.6. Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

| Asphalt (8052-42-4) | |
|---------------------|--------------|
| LD50 Oral Rat | > 5000 mg/kg |
| LD50 Dermal Rabbit | > 2000 mg/kg |
| LC50 Inhalation Rat | > 94.4 mg/m³ |

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:** Suspected of causing cancer.

| Asphalt (8052-42-4) | |
|---|---|
| IARC group | 2B |
| OSHA Hazard Communication Carcinogen List | In OSHA Hazard Communication Carcinogen list. |

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: Prolonged exposure may cause irritation. May cause irritation of the respiratory tract and the other mucous membranes. Toxic and harmful fumes may be generated from heating asphalt: Inhalation of fumes may cause dizziness and/or irritation to the eyes, nose, and throat. Irritating and toxic hydrogen sulfide gas may be released. Hydrogen sulfide is a fatal and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. 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: May cause slight irritation to eyes. Risk of thermal burns on contact with molten product. **Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Suspected of causing cancer.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Not classified.

12.2. Persistence and Degradability

| LTBC | |
|-------------------------------|------------------|
| Persistence and Degradability | Not established. |

12.3. Bioaccumulative Potential

| LTBC | |
|--|----|
| Bioaccumulative Potential Not established. | |
| Asphalt (8052-42-4) | |
| BCF Fish 1 (no bioaccumulation expected) | |
| Log Pow | >6 |

- **12.4. Mobility in Soil** No additional information available
- 12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions. Do not pressurize, cut, or weld containers.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

- **14.1. In Accordance with DOT** Not regulated for transport
- 14.2. In Accordance with IMDG Not regulated for transport
- 14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

| LTBC | | · |
|---|---------------------------------|---|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard | |
| Asphalt (8052-42-4) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |
| Water (7732-18-5) | | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | | |

15.2. 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

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

Revision Date : 11/09/2016

Other Information : This document has been prepared in accordance with the SDS

requirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR

1910.1200]

GHS Full Text Phrases:

| Aquatic Acute 2 | Hazardous to the aquatic environment - Acute Hazard Category 2 |
|-------------------|--|
| Aquatic Chronic 2 | Hazardous to the aquatic environment - Chronic Hazard Category 2 |
| Carc. 2 | Carcinogenicity Category 2 |

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| Comb. Dust | Combustible Dust |
|---------------|---|
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| Skin Sens. 1 | Skin sensitization Category 1 |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H351 | Suspected of causing cancer |
| H401 | Toxic to aquatic life |
| H411 | Toxic to aquatic life with long lasting effects |

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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