

1. Identification

| Product identifier | LMCRS-2 |
|----------------------------------|--|
| Other means of identification | None. |
| Recommended use | Not available. |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Suppl | ier/Distributor information |
| Manufacturer: | Ergon Asphalt & Emulsions, Inc. |
| Address: | 2829 Lakeland Drive |
| | Jackson, MS 39232 |
| Website: | www.ergonasphalt.com |
| Telephone: | 1-800-222-7122 (Customer Service) |
| E-mail: | sds@ergon.com |
| 24 hour Emergency (CHEMTREC): | North America 1-800-424-9300; International 1-703-527-3887 |

2. Hazard(s) identification

| Physical hazards | Not classified. |
|--|--|
| Health hazards | Not classified. |
| Environmental hazards | Not classified. |
| OSHA defined hazards | Not classified. |
| Label elements | |
| Hazard symbol | None. |
| Signal word | None. |
| Hazard statement | The mixture does not meet the criteria for classification. |
| Precautionary statement | |
| Prevention | Observe good industrial hygiene practices. |
| Response | Wash hands after handling. |
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of waste and residues in accordance with local authority requirements. |
| Hazard(s) not otherwise classified (HNOC) | Molten asphalt presents a thermal hazard. |
| Supplemental information | Vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN SULFIDE (H2S) can be harmful if inhaled. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------|--------------------------|------------|---------|
| ASPHALT | | 8052-42-4 | 55 - 75 |
| WATER | | 7732-18-5 | 20 - 40 |
| HYDROCHLORIC ACID | | 7647-01-0 | < 1 |

4. First-aid measures

| Inhalation | If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. |
|--------------|---|
| Skin contact | If clothing sticks to the skin, do not remove. Lotion or hand cream may aid in the removal of asphalt. Wash contact areas with soap and water. If needed, seek medical attention. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |

Material name: LMCRS-2

| Ingestion | Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large amount does occur, call a poison control center immediately. | | |
|--|--|--|--|
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. | | |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. | | |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. | | |
| 5. Fire-fighting measures | S | | |
| Suitable extinguishing media | Foam. Dry chemical powder. Carbon dioxide (CO2). | | |
| Unsuitable extinguishing media | Water. Do not use water jet as an extinguisher, as this will spread the fire. | | |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed: | | |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. | | |
| Fire fighting equipment/instructions | ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. | | |
| Specific methods | In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. | | |
| General fire hazards | No unusual fire or explosion hazards noted. | | |
| 6. Accidental release me | asures | | |
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS. | | |
| Methods and materials for containment and cleaning up | This product is miscible in water. | | |
| | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. | | |
| | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. | | |
| | Never return spills to original containers for re-use. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. | | |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. | | |
| 7. Handling and storage | | | |
| Precautions for safe handling | Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. | | |
| Conditions for safe storage, including any incompatibilities | Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Do not allow material to freeze. | | |

8. Exposure controls/personal protection

Occupational exposure limits

| Components | Туре | Value | |
|--------------------------------------|---|---------------------------------|--------------------------------|
| HYDROCHLORIC ACID (CAS 7647-01-0) | Ceiling | 7 mg/m3 | |
| | | 5 ppm | |
| US. ACGIH Threshold Limi | t Values | | |
| Components | Туре | Value | Form |
| ASPHALT (CAS 8052-42-4) | TWA | 0.5 mg/m3 | Inhalable fume. |
| HYDROCHLORIC ACID (CAS 7647-01-0) | Ceiling | 2 ppm | |
| US. NIOSH: Pocket Guide | to Chemical Hazards | | |
| Components | Туре | Value | Form |
| ASPHALT (CAS 8052-42-4) | Ceiling | 5 mg/m3 | Fume. |
| HYDROCHLORIC ACID (CAS 7647-01-0) | Ceiling | 7 mg/m3 | |
| | | 5 ppm | |
| ological limit values | No biological exposure limits noted for | or the ingredient(s). | |
| propriate engineering ntrols | Provide adequate ventilation, includir occupational exposure limit is not exc | | to ensure that the defined |
| dividual protection measure | s, such as personal protective equ | - | |
| Eye/face protection | Wear safety glasses; chemical goggle | es (if splashing is possible). | |
| Skin protection | | | |
| Hand protection | Chemical resistant gloves are recomn gloves. | nended. If contact with forearr | ns is likely wear gauntlet sty |
| Other | Wear appropriate clothing to prevent vapor contact. Plastic or rubber glove | | t and repeated or prolonged |
| Respiratory protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. | | |
| Thermal hazards | Wear appropriate thermal protective | clothing, when necessary. | |
| eneral hygiene nsiderations | Always observe good personal hygiene measures, such as washing after handling the material an before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment remove contaminants. | | |

9. Physical and chemical properties

| Appearance | Brown to black in color. |
|--|-----------------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Black. |
| Odor | Tar-like |
| Odor threshold | Not available. |
| рН | 2.1 - 4 |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | >= 212 °F (>= 100 °C) estimated |
| Flash point | > 212.0 °F (> 100.0 °C) estimated |
| Evaporation rate | < 1 |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or ex | xplosive limits |

Flammability limit - lower Not available.

| Flammability limit - upper (%) | Not available. |
|--|----------------------------------|
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | > 700 °F (> 371.11 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Specific gravity | 1.01 |
| 10 Stability and reactivi | i+17 |

10. Stability and reactivity

| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport | | |
|---------------------------------------|--|--|--|
| Chemical stability | Stable under normal temperature conditions. | | |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. | | |
| Conditions to avoid | Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat product. | | |
| Incompatible materials | Strong oxidizing agents. | | |
| Hazardous decomposition products | Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen sulfide. | | |

11. Toxicological information

Information on likely routes of exposure

| Inhalation | Prolonged inhalation may be harmful. | | |
|---|--|--|--|
| Skin contact | No adverse effects due to skin contact are expected. | | |
| Eye contact | May be irritating to eyes. | | |
| Ingestion | Expected to be a low ingestion hazard. | | |
| ymptoms related to the hysical, chemical and | Direct contact with eyes may cause temporary irritation. | | |

Sy ph toxicological characteristics

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|--------------------------------------|--------------------------------|---------------------------------|
| HYDROCHLORIC ACID (CAS 7647- | -01-0) | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Mouse | 1449 mg/kg |
| * Estimates for product may b | pe based on additional compone | nt data not shown. |
| Skin corrosion/irritation | Prolonged skin contact may ca | ause temporary irritation. |
| Serious eye damage/eye irritation | May be irritating to eyes. | |
| Respiratory or skin sensitizati | on | |
| Respiratory sensitization | Not available. | |
| Skin sensitization | May cause skin disorders if co | ntact is repeated or prolonged. |
| Material name: LMCRS-2 | | SDS US |

| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | | | |
|---|--|---|---------------------------------------|--|
| Carcinogenicity | straight-run b | Risk of cancer cannot be excluded with prolonged exposure. IARC: occupational exposures to straight-run bitumens and their emissions during road paving are "possibly carcinogenic to humans" (Group 2B). | | |
| IARC Monographs. Overal | ll Evaluation of | f Carcinogenicity | | |
| ASPHALT (CAS 8052-42- HYDROCHLORIC ACID (OSHA Specifically Regulat | , . | | able as to carcinogenicity to humans. | |
| Not regulated. | | | | |
| US. National Toxicology P | rogram (NTP) | Report on Carcinogens | | |
| Not listed. | | | | |
| Reproductive toxicity | Not classified. | Not classified. | | |
| Specific target organ toxicity - single exposure | Not classified. | | | |
| Specific target organ toxicity - repeated exposure | Not classified. | | | |
| Aspiration hazard | Not available. | | | |
| Chronic effects | Prolonged exposure may cause chronic effects. | | | |
| Further information | This product has no known adverse effect on human health. | | | |
| 12. Ecological information | on | | | |
| Ecotoxicity | Not expected | to be harmful to aquatic organ | isms. | |
| Components | | Species | Test Results | |
| HYDROCHLORIC ACID (CAS | 7647-01-0) | | | |
| Aquatic | | | | |
| Fish | LC50 | Western mosquitofish (Gamb | usia affinis) 282 mg/l, 96 hours | |
| | | | | |

* Estimates for product may be based on additional component data not shown.

| Persistence and degradability | No data is available on the degradability of this product. |
|----------------------------------|---|
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

13. Disposal considerations

| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. No components are identified as hazardous wastes. Disposal recommendations are based on uncontaminated material. |
|--|---|
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Not applicable. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Avoid discharge into water courses or onto the ground. |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

DOT

Not regulated as dangerous goods.

IATA N

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

| 15. Regulatory inform | nation | | | | |
|--|--|-----------------------------------|--|--|--|
| US federal regulations | All components | are on the l | J.S. EPA TSCA Inventor | ry List. | |
| TSCA Section 12(b) Ex | xport Notification (4 | 0 CFR 707 | , Subpt. D) | | |
| Not regulated. | | | | | |
| CERCLA Hazardous Su | - | R 302.4) | | | |
| ASPHALT (CAS 8052 | | | Listed. | | |
| HYDROCHLORIC AC SARA 304 Emergency | | | Listed. | | |
| HYDROCHLORIC AC | | | 5000 LBS | | |
| OSHA Specifically Reg | | (29 CFR 19 | | | |
| Not regulated. | | • | | | |
| Superfund Amendments a | nd Reauthorization | Act of 198 | 6 (SARA) | | |
| SARA 302 Extremely I | | | | | |
| Chemical name | q | teportable Juantity pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
| HYDROCHLORIC ACID | 7647-01-0 5 | 000 | 500 | | |
| SARA 313 (TRI report Not regulated. | ing) | | | | |
| Other federal regulations | | | | | |
| Clean Air Act (CAA) Se HYDROCHLORIC AC Clean Air Act (CAA) Se HYDROCHLORIC AC | ID (CAS 7647-01-0) ection 112(r) Accide | | | R 68.130) | |
| Safe Drinking Water A (SDWA) | Act Not regulated. | | | | |
| Drug Enforcement and Chemical Cod | | EA). List 2, | Essential Chemicals | (21 CFR 1310.02(b |) and 1310.04(f)(2) |
| | C ACID (CAS 7647-01- | | 6545 | | |
| - | - | - | & 2 Exempt Chemical | I Mixtures (21 CFR | 1310.12(c)) |
| HYDROCHLORIC ACID (CAS 7647-01-0) 20 %WV DEA Exempt Chemical Mixtures Code Number | | | | | |
| | C ACID (CAS 7647-01- | 0) | 6545 | | |
| US state regulations | | | | | |
| California Proposition WARNING | | duct contain | s a chemical known to | the State of California | to cause cancer. |
| 69502.3, subd. (a) |)) | | onsumer Products R | egulations (Cal. Co | de Regs, tit. 22, |
| | C ACID (CAS 7647-01- | 0) | | | |
| International Inventories | | | | | |
| Country(s) or region | Inventory nar | | | | On inventory (yes/no)* |
| Australia | | - | mical Substances (AICS |)) | Yes |
| Canada | Domestic Subst | • | • | | Yes |
| Canada | Non-Domestic S | | . , | | No |
| China | Inventory of Ex | isting Chemi | cal Substances in China | a (IECSC) | Yes |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

| Issue date | 03-23-2015 | | | | |
|----------------------|--|--|--|--|--|
| Revision date | 10-23-2019 | | | | |
| Version # | 02 | | | | |
| Further information | HMIS® is a registered trade and service mark of the NPCA. | | | | |
| NFPA ratings | Health: 2 Flammability: 1 Instability: 0 | | | | |
| References | ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices | | | | |
| 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. The information in the sheet was written based on the best knowledge and experience currently available. | | | | |
| Revision information | Hazard(s) identification: Hazard(s) not otherwise classified (HNOC) Hazard(s) identification: Supplemental information Composition / Information on Ingredients: Ingredients Fire-fighting measures: Specific hazards arising from the chemical Physical & Chemical Properties: Multiple Properties Toxicological information: Carcinogenicity Toxicological information: Eye contact Toxicological information: Eye contact Regulatory Information: United States Regulatory information: US state regulations HazReg Data: International Inventories | | | | |