



Material Safety Data Sheet

Material Name: Anionic Asphalt Emulsions

Section 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Manufacturer Information:

Colasphalt, a division of Canadian Road Builders Inc.
Zone 4, 26222 Twp Rd 530A
Acheson, Alberta, T7X 5A7

Contact information

Phone: (780) 960-3423
Fax: (780) 960-1666

Product Name:

Anionic Asphalt Emulsion OR Asphalt Emulsion

Product Identifiers:

SS-1C, SS-1, RS-1, MS-1, HF100S, HF100P, HF150S, HF150P, HF250S, HF250P, HF350P, HF350P,
Colasphalt PRIME, Colasphalt Spray Patch Emulsion (CSPE-1), Colasphalt Trackless Tack

Section 2: HAZARD IDENTIFICATION

Emergency Overview

Hot product will cause severe burns. If burned by hot product, cool affected area immediately with cold water. Do not remove asphalt emulsion from skin. Heated product may release toxic hydrogen sulfide. Repeated or prolonged contact with skin can produce irritation or dermatitis.

Potential Health Effects – Eyes

Vapors are irritating to the eyes. Hot liquid emulsion or asphalt may cause serious thermal burns on direct contact. Any exposure to the eyes requires immediate first aid attention.

Potential Health Effects – Skin

Hot liquid product may cause serious thermal burns on direct contact. Any prolonged skin contact can result in dry cracked skin and dermatitis.

Potential Health Effects – Ingestion

Not a likely route of exposure under normal product use conditions. Do not ingest asphalt emulsion. Hot product will cause thermal burns.

Potential Health Effects – Inhalation

May Cause headaches, dizziness and loss of appetite. Product vapors may be irritating to the respiratory tract, nose and throat. Hydrogen sulfide and other sulfur containing gasses may be present at elevated temperatures. Effects of exposure could include irritation to the nose and throat, nausea, vomiting and signs of nervous system depression.

Asphalt emulsion is not a known carcinogen.



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Section 3: COMPOSITION/INFORMATION on INGREDIENTS

Component	Percent (w/w)	CAS Number	LD ₅₀	LC ₅₀
Asphalt Cement	55-75	8052-42-4	Oral 5000 mg/kg Dermal 2000 mg/kg	N/A
Water	25-45	7732-18-5	N/A	N/A
Solvent	0-10	Mixture	N/A	N/A
Tall Oil	0-5	Mixture	7.3 g/kg	N/A
Emulsifier	0-5	Proprietary	N/A	N/A
Polymer	0-6	9003-55-8	71.3 mg/kg	N/A
Sodium Hydroxide	<1	1310-73-2	40 mg/kg	N/A

Section 4: FIRST AID MEASURES

First Aid – Eyes

Flush eyes for at least 15 minutes with clean water. Patch lightly, allowing drainage. Seek medical attention.

First Aid – Skin

Remove non-adhering contaminated clothing. Cool adherent materials and burned areas with ice and/or cold water. Do not remove adherent material or clothing. Do not use solvents to remove asphalt from the skin. Seek medical attention.

First Aid – Ingestion

Do not induce vomiting or give liquids. Seek immediate medical attention.

First Aid – Inhalation

Move exposed person to fresh air. If breathing has stopped, apply artificial respiration. Seek medical attention.

Section 5: FIRE FIGHTING MEASURES

General Fire Hazards

See Section 9 for Flammability properties.

Release vapors may form flammable/explosive concentrations in confined areas.

Hazardous Combustion Products

Toxic gases produced in fire, such as CO, CO₂, and H₂S.

Extinguishing Media

Use dry chemical foam or CO₂.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear



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Section 6: ACCIDENTAL RELEASE MEASURES

Containment Procedures

Eliminate all sources of ignition. Contain hot liquid by diking and allow to cool and solidify.

Clean-Up Procedures

Comply with federal, provincial and local requirements for spill notification.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate protective equipment and clothing during clean-up.

Section 7: HANDLING AND STORAGE

Handling Procedures

Grounding of containers/pouring equipment is necessary when transferring hot liquid product. Significant concentrations of hydrogen sulfide (H₂S) gas can be generated and accumulate in storage tanks and bulk transport compartments which may require additional precautions and procedures during loading and unloading. When opening covers and outlet caps on storage tanks, use face shield and gloves to avoid possible injury from pressurized product.

Storage Procedures

Store product below the flash point and keep away from all ignition sources. Head spaces in storage tanks may contain toxic hydrocarbon vapors and hydrogen sulphide gas. This product is a mixture of water and asphalt. Do not store above 80°C. Heating product above 80°C may cause water portion to boil which may result in an overflow of hot product from storage container.

Section 8: EXPOSURE CONTROLS AND PERSONEL PROTECTION

Component Exposure Limits

Asphalt (CAS #: 8052-42-4)

ACGIH: 0.5 mg/m³ TWA (fume, inhalable fraction, as benzene soluble aerosol)

NIOSH: 5 mg/m³ Ceiling (15 min, fumes)

Engineering Controls:

Use local exhaust or general dilution ventilation when using at elevated temperatures or during activities that generate vapors or mists, to maintain levels below exposure limits. Ensure that an emergency eye wash station and safety shower is located near the work area.

Personal Protective Equipment (PPE):

Respiratory Protection:

Use air purifying respirators with organic vapor cartridges in poorly ventilated areas and at product temperatures of 185° or greater. At elevated concentrations exceeding 10x the exposure limit use air supplied respirators or self-contained breathing apparatus.

Eye Protection:



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Wear approved safety goggles or face shield when handling asphalt emulsion to prevent contact with eyes.

Section 8: EXPOSURE CONTROLS AND PERSONEL PROTECTION (Contin...)

Skin Protection:

Wear chemical resistant gloves (e.g. neoprene or butyl rubber) to prevent skin contact and insulated gloves when handling hot product. Additional protection may be necessary to prevent skin contact including use of apron, arm covers, face shield or boots.

Section 9: PHYSICAL and CHEMICAL PROPERTIES

Physical State: Liquid.

Appearance: Black or brown.

Flash Point: >100°C

Auto Ignition Temperature: ND

Lower Flamability limit: ND

Odor: Slight petroleum odor.

Vapor Pressure: < 1 mm Hg @ 20°C.

Vapor Density: > 1 (Air =1).

Specific Gravity: 0.95 – 1.13

Evaporation Rate: NA.

pH (in water): 9-12.

Flash Point Method: COC

Upper Flamability Limit: ND

Octanal/H2O Coeff: ND

Boiling Point: 100°C (the water phase).

Freezing Point: 0°C (the water phase).

Viscosity: NA.

Solubility in Water: Partially miscible with water.

Section 10: CHEMICAL STABILITY & REACTIVE INFORMATION

Chemical Stability

Stable. Avoid contact with incompatible materials, excessive heat, sources of ignition and open flame.

Chemical Stability: Conditions to Avoid

None

Incompatibility

Incompatible with strong acids or bases, and oxidizing agents such as nitrates, chlorates and peroxides.

Hazardous Decomposition

Oxides of carbon, sulfur and nitrogen. Styrene, 1, 3 butadiene and aldehydes.

Possibility of Hazardous Reactions

Will not occur.

Section 11: TOXICOLOGICAL and ECOLOGICAL INFORMATION

Carcinogenicity

This product is not known to be carcinogenic



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Section 12: ECOLOGICAL INFORMATION

There is no information available for the product. Should you have any questions please refer to the contact information in section 1.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Section 14: TRANSPORTATION INFORMATION

This product is not classified as a Hazardous Material under U.S. DOT and Canadian TDG regulations.

Section 15: REGULATORY INFORMATION

OSHA/MSHA Hazard Communication:

This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.

CERCLA/SUPERFUND:

This product is not listed as a CERCLA hazardous substance.

EPCRA SARA Title III:

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered to be an acute health hazard (irritation).

EPCRA SARA Section 313:

This product contains none of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

RCRA:

If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA:

This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.



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WHMIS/DSL:

Products containing asphalt are classified as D2B and are subject to WHMIS requirements

Section 16: OTHER INFORMATION

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.