Section 1: IDENTIFICATION

Product Name: Cationic Quick Setting Emulsion

Synonyms: CQS-1 (H) (P); CQF-1 (H).

Product Use: Micro Surfacing, Slurry Seal, Fog Seal.

Restrictions on Use: Not available.

Manufacturer/Supplier:

Western Asphalt Products
Brandon Asphalt Terminal
65 Limestone Road East
Brandon, MB R7A 7L5

Western Asphalt Products
Bruderheim Asphalt Terminal
55501 Range Road 203
Bruderheim, AB T0B 0S0

Phone Number: +1 (204) 725-9538 - Brandon Terminal

+1 (780) 796-3437 - Bruderheim Terminal

Emergency Phone: CANUTEC: 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone

Date of Preparation of SDS: October 25, 2024

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification:
Skin Irritation, Category 2
Eye Damage, Category 1
Sensitization - Skin, Category 1
Carcinogenicity, Category 2
Reproductive Toxicity, Effects on or via Lactation
Specific Target Organ Toxicity (Repeated Exposure), Category 2

LABEL ELEMENTS

Hazard Pictogram(s):

Signal Word: Warning

Hazard Statements:
Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause harm to breast-fed children.
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, vapours, or spray.
Avoid contact during pregnancy and while nursing.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, protective clothing and eye protection.

Response: IF ON SKIN: Wash with plenty of water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Immediately call a POISON CENTER or doctor.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 65% of this product mixture consists of ingredient(s) of unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200). This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Asphalt	Not available.	8052-42-4	30 - 60
Sulfur	Sulphur	7704-34-9	0.1 - 5
Amides, from ammonia-ethanolamine reaction by-products and tall-oil fatty acid	Not available.	68647-75-6	0.1 - 5
Fatty polyamine derivative *	Not available.	Proprietary	0.1 - 5
Tall oil fatty acid polyamine condensate **	Not available.	Proprietary	0.1 - 5
Fatty amidoamine 1 ***	Not available.	Proprietary	0.1 - 5
Fatty amidoamine 2 ***	Not available.	Proprietary	0.5 - 1.5
Fatty amidoamine 3 ***	Not available.	Proprietary	0.1 - 1
1,2-Ethanediamine, N1,N2-bis(2-aminoethyl)-	Triethylenetetramine	112-24-3	0.1 - 1

Actual concentration range(s) withheld as a trade secret.
* See Section 16 for the supplier's Canadian HMIRA trade secret registry number.
** See Section 16 for the supplier's Canadian HMIRA trade secret registry number.
*** See Section 16 for the supplier's Canadian HMIRA trade secret registry number.

Section 4: FIRST-AID MEASURES

Inhalation: If inhaled: Call a poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Eye Contact: If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin Contact: If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Acute and delayed symptoms and effects: May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Asphalt fumes can increase susceptibility to sunburn.

Ingestion: If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. If swallowed in large quantities, Asphalt can obstruct the intestine.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION
Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is sensitive to static discharge at temperatures at or above the flash point.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO_2, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon. Oxides of sulphur. Oxides of nitrogen. Ammonia.

Protection of Firefighters: Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus

(SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
Personal Precautions:	Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
Environmental Precautions:	Keep out of drains, sewers, ditches, and waterways.
Methods for Containment:	Stop leak if without risk. Do not flush to sewer or allow to enter waterways.
Methods for Clean-Up:	Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Other Information:	See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:
Do not swallow. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, vapours, or spray. Avoid contact during pregnancy and while nursing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. See Section 8 for information on Personal Protective Equipment.

Storage:
Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children. Asphalt contains trace amounts of Hydrogen sulfide which can accumulate in vapour space of tanks and containers.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
Component

Asphalt [CAS No. 8052-42-4]
- **ACGIH:** 0.5 mg/m³ (TWA); A4; BEI; Inhalable fraction; For Asphalt (Bitumen) fume, as benzene-soluble aerosol
- **OSHA:** No PEL established.

Sulphur [CAS No. 7704-34-9]
- **ACGIH:** 10 mg/m³ (TWA) (Inhalable.); 3 mg/m³ (TWA) (Respirable.); For Particles (Insoluble or Poorly Soluble) Not Otherwise Specified
- **OSHA:** 15 mg/m³ (Total dust) (TWA), 5 mg/m³ (Respirable fraction) (TWA); For Particulates Not Otherwise Regulated (PNOR).

Amides, from ammonia-ethanolamine reaction by-products and tall-oil fatty acid [CAS No. 68647-75-6]

ACGIH: No TLV established.
OSHA: No PEL established.

Fatty polyamine derivative [CAS No. Proprietary]

ACGIH: No TLV established.
OSHA: No PEL established.

Tall oil fatty acid polyamine condensate [CAS No. Proprietary]

ACGIH: No TLV established.
OSHA: No PEL established.

Fatty amidoamine 1 [CAS No. Proprietary]

ACGIH: No TLV established.
OSHA: No PEL established.

Fatty amidoamine 2 [CAS No. Proprietary]

ACGIH: No TLV established.
OSHA: No PEL established.

Fatty amidoamine 3 [CAS No. Proprietary]

ACGIH: No TLV established.
OSHA: No PEL established.

Triethylenetetramine [CAS No. 112-24-3]

ACGIH: No TLV established.
OSHA: No PEL established.

PEL: Permissible Exposure Limit
TLV: Threshold Limit Value
TWA: Time-Weighted Average

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Wear chemical safety goggles. Ensure that eyewash stations are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3:20 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications for further information.

Skin and Body Protection:	Wear protective clothing.
Respiratory Protection:	If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-18, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
General Hygiene Considerations:	Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown to black liquid.
Colour:	Brown to black.
Odour:	Characteristic. Hydrocarbon.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Melting Point / Freezing Point:	Not available.
Initial Boiling Point:	Not available.
Boiling Range:	Not available.
Flash Point:	230 °C (446 °F) (Asphalt)
Evaporation Rate:	Not available.
Flammability (solid, gas):	Not applicable.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Relative Vapor Density:	Not available.
Relative Density:	Not available.
Solubilities:	Insoluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.

Kinematic Viscosity: Not available.

Percent Volatile, wt. %: Not available.

VOC content, wt. %: Not available.

Density: Not available.

Coefficient of Water/Oil Distribution: Not available.

Particle Characteristics: Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity: Contact with incompatible materials.

Chemical Stability: Stable under normal storage conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Contact with incompatible materials.

Incompatible Materials: Acids. Bases. Oxidizers.

Hazardous Decomposition Products: Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

Component	CAS No.	LD_{50} oral	LD_{50} dermal	LC_{50}
Asphalt	8052-42-4	Not available.	Not available.	Not available.
Sulphur	7704-34-9	> 8437 mg/kg (rat)	Not available.	Not available.
Amides, from ammonia-ethanolamine reaction by-products and tall-oil fatty acid	68647-75-6	> 5000 mg/kg (rat)	Not available.	Not available.
Fatty polyamine derivative	Proprietary	2635 mg/kg (calculated)	2635 mg/kg (calculated)	Not available.
Tall oil fatty acid polyamine condensate	Proprietary	2200 mg/kg (rat)	Not available.	Not available.
Fatty amidoamine 1	Proprietary	Not available.	Not available.	Not available.
Fatty amidoamine 2	Proprietary	Not available.	Not available.	Not available.
Fatty amidoamine 3	Proprietary	Not available.	Not available.	Not available.
Triethylenetetramine	112-24-3	1600 mg/kg (mouse)	805 mg/kg (rabbit)	Not available.

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Teeth.

Symptoms (including delayed and immediate effects)

Inhalation: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Eye: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin: May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Asphalt fumes can increase susceptibility to sunburn.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. If swallowed in large quantities, Asphalt can obstruct the intestine.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Liver. Kidneys

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: May cause cancer. Long-term or repeated exposures to Asphalt fumes are possibly carcinogenic to humans.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Asphalt	A4	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Fatty amidoamine 3	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.

Mutagenicity: Not available.

Reproductive Effects: May cause harm to breast-fed children. Avoid contact during pregnancy and while nursing. Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Placard(s): Not applicable.

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Placard(s): Not applicable.

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)
The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)
The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States
This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

California
California Prop 65:

WARNING This product can expose you to Asphalt and Diethanolamine, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Section 16: OTHER INFORMATION

Other information:
* The claim for trade secret exemption has been filed in Canada under HMIRA # 9882, July 30, 2016.
** The claim for trade secret exemption has been filed in Canada under HMIRA # 03331166, May 22, 2019.
*** The claim for trade secret exemption has been filed in Canada under HMIRA # 9964, April 22, 2016.

Disclaimer:
The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

Date of Preparation of SDS:	October 25, 2024
Version:	3.0
GHS SDS Prepared by:	**Aegis Regulatory Inc.** **Phone: 1 (519) 488-0351** **www.aegisreg.com**