



**CQS-1H, CQS-LM,
LMCQS-1H, CQS-1HP
Safety Data Sheet**

Section 1: Identification of the substance/mixture and of the company/undertaking

Product form: Liquid

Substance name: CQS-1H, LMCQS-1H, CQS-LM, CQS-1HP, CQS-1h

Synonyms: Slurry Oil, Micro-Surfacing, Polymer Modified Quick Set, Polymer Modified Emulsion

Manufacturer

Quality Emulsions LLC

308 S Lebaron

Mesa, AZ 85210

(480) 619-4100

Emergency telephone number

CHEMTREC (800) 424-9300

Section 2: Hazards identification

Classification of the substance or mixture:	Eye Irritant	Category 2A
	Skin Corrosion/Irritation	Category 2
	Respiratory/Skin Sensitizer	Category 1



Signal Word: WARNING

Hazard Statements

- May cause skin and eye irritation.
- Fumes from heated material may be irritating.
- Aspiration hazard if swallowed.
- Substance may be harmful if swallowed irritating mouth, throat and/or stomach.
- Prolonged or excessive inhalation may cause respiratory tract irritation.
- Vapors may have a strong offensive odor which may cause headaches, nausea and vomiting.
- Symptoms of overexposure include: fatigue, tearing of eyes, burning sensation in the throat, cough, chest discomfort and skin irritation

Precautionary Statements

- Obtain and read instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Exposure to hot material may cause thermal burns.

Section 3: Composition/information on ingredients

Chemical Name	Amount	CAS Number
Asphalt	60-75%	8052-42-4
Water	25-40%	7732-18-5
Hydrochloric Acid	0.25-1.5%	7647-01-0
Hydrogen Sulfide	0.0-0.5%	7783-06-4
Emulsifier (Confidential Ingredient B)	0.25-3.0%	Trade Secret
Latex	0.0-6.0%	98-82-8

Section 4: First aid measures

First-aid measures general:	Get prompt medical attention. Dilute with water. If solidified, treat as neat asphalt.
First-aid measures after inhalation:	At elevated temperatures, may cause irritation of the respiratory tract. Although this product is not known to cause respiratory problems, if breathing is difficult, safely remove victim to fresh air and provide oxygen. Get immediate medical attention.
First-aid measures after skin contact:	Wash skin with soap and water. Wear protective glove to minimize skin contamination. For hot material exposure, DO NOT attempt to remove solidified material from the skin. DO NOT attempt to dissolve with solvents or thinners.
First-aid measures after eye contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. Burns due to contact with heated material require immediate medical attention.
First-aid measures after ingestion:	Get immediate medical attention. Do not induce vomiting due to danger of aspirating liquid into lungs. Gastric lavage may be required.

Most important symptoms and effects, both acute and delayed

Eyes:	Irritation
Skin:	Irritation
Inhalation:	Irritation
Chronic Effects:	No known hazards in normal industrial use.

Section 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:	Use alcohol foam, carbon dioxide or water spray when fighting fires involving this material.
Unsuitable extinguishing media:	Exercise care when using water as contact with hot asphalt products - may produce steam and violent foaming.

Special hazards arising from the substance or mixture

Fire hazard:	Product is an aqueous solution. Heated product may produce hazardous fumes, decomposition products or residues. Small quantities of hydrogen sulfide may be released upon heating.
Explosion hazard:	None
Reactivity:	Avoid contact with strong bases.

Advice for firefighters

Firefighting instructions:	Decomposition may produce fumes, smoke, oxides of carbon and hydrocarbons and possible small quantities of hydrogen sulfide. Avoid breathing vapors from heated material. Combustion may produce CO, NOx, Sox and reactive hydrocarbons.
Protection during firefighting:	As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH approved and full protective gear.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures:	Clean up spills immediately using appropriate personal protective equipment.
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For non-emergency personnel

Protective equipment:	Gloves, safety glasses, boots.
Emergency procedures:	Absorb spills with absorbent material. Contain spilled liquid with sand or earth.

For emergency responders

Protective equipment:	Gloves, safety glasses, boots.
Emergency procedures:	Stop the source of the leak or release. Clean up releases as soon as possible.

Environmental precautions

Prevent contamination of soil, surface water or groundwater.

Methods for containment/clean up

Absorb spills with absorbent materials. Contain spilled liquid with sand or earth. Contain liquid to prevent contamination of soil, surface water or groundwater. Large spillage should be dammed-off and pumped into containers.

Section 7: Handling and storage

Precautions for safe handling

Shelf Life:	30 Days @ 180 degrees F (in original, sealed containers).
Additional hazards when processed:	When handling hot material, use protective clothing impervious to this material.
Precautions for safe handling:	Use good Hygiene measures: wash exposed areas with mild soap and water before eating, drinking or smoking and again when leaving work.
Storage conditions:	Do not store at temperatures above 200 degrees F.

Section 8: Exposure controls/personal protection

Engineering Controls:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Eye/Face Protection Requirements:	Where contact with this material is likely, eye protection is recommended.
Skin Protection Requirements:	Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation and potential exposure.
Respiratory Protection Requirements:	Where there is potential for airborne exposure in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Exposure Guidelines

Hydrochloric Acid:	NIOSH REL	5 ppm
	OSHA PEL	5 ppm, 7 mg/m ³
	OSHA Ceiling Limit	5 ppm, 7 mg/m ³
	Skin Designation	
Hydrogen Sulfide:	NIOSH REL	C 10 ppm, 15 mg/m ³ (10 min.)
	OSHA PEL	C 20 ppm, 50 ppm (10 min.)

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Appearance:	Brown to Black
Odor:	Asphalt Odor
pH:	2-6
Melting point:	0 C
Freezing point:	0 C
Specific Gravity:	1.0-1.1 (Water=1)
Boiling point:	100 degrees C @ 7600 mm Hg
Flash point:	None
UEL:	N/A
LEL:	N/A
Vapor pressure:	Same as water mm Hg @ 21 degrees C
Relative vapor density at 20 °C:	1
Solubility:	Soluble in water
%Volatiles:	<35% @ 21 degrees C @ 760b mm Hg
VOC:	<2

Section 10: Stability and reactivity

Reactivity:	Low
Chemical stability:	This compound is stable at ambient conditions.
Possibility of hazardous reactions:	Low
Conditions to avoid:	Avoid extreme temperatures.
Incompatible materials:	Avoid contact with strong bases.
Hazardous decomposition product:	Decomposition will not occur if handled and stored properly.

Section 11: Toxicological information

Skin corrosion:	May cause irritation and a rash with prolonged or repeated contact with skin.
Serious eye damage/irritation:	Irritating, may injure eye tissue if not removed promptly.
Respiratory or skin sensitization:	Repeated contact may cause skin irritation; prolonged inhalation may cause respiratory tract irritation.
Germ cell mutagenicity:	None
Carcinogenicity:	IARC has determined Hydrochloric acid may be carcinogenic in humans.
Reproductive toxicity:	This product contains one or more chemicals known to cause reproductive harm.
Specific target organ toxicity (single exposure):	Skin and/or respiratory irritation, mild.
Specific target organ toxicity (repeated exposure):	Skin, respiratory, kidney and liver.
Aspiration hazard:	Respiratory distress as a result of aspiration.
Symptoms/injuries after inhalation:	Respiratory tract irritation, cough, chest discomfort.
Symptoms/injuries after eye contact:	Eye tearing, irritation; burns if contact made with heated material.
Symptoms/injuries after ingestion:	Harmful if swallowed, irritating to mouth, throat and stomach.

Section 12: Ecological information

Environmental Hazards

This material should be prevented from uncontrolled applications to soil or earth. This material should be prevented from entering storm water, sewage drainage systems and bodies of water.

Section 13: Disposal considerations

Waste Disposal:	This product, as supplied, when discarded or disposed of, may be a hazardous waste according to Federal regulations (40 CFR 261). Under the Resource Recovery Act (RCRA), it is the responsibility of the user of the product to determine whether the material is a hazardous waste subject to RCRA. Treat or dispose of waste material in accordance with all local, state/provincial and national requirements. Avoid disposal into wastewater treatment facilities.
Contaminated Materials:	Treat as product waste.
Container Disposal:	Unclean empty containers should be disposed of in the same manner as the contents.

Section 14: Transport information

Product Label:	CQS-1H, LMCQS-1H, CQS-1H, CQS-1HP
UN Number:	Non-hazardous, no UN number
DOT Shipping Name:	Non Regulated, Water Based Asphalt Emulsion
DOT Hazard Class:	Non-Hazardous

Section 15: Regulatory information

EEC Symbols and Indications of Danger:	Irritant (Xi)
R-Phrases:	R36/37/38 – Irritating to eyes, respiratory system and skin
WHMIS Hazard Symbols:	Class D – Irritant
CERCLA Hazardous Substances:	HYDROCHLORIC ACID (CAS 7647-01-0) – RQ 5000 lb. HYDROGEN SULFIDE (CAS 7783-06-4) – RQ 100 lb.
California Proposition 65:	This product contains one or more chemicals known to the State of California to cause cancer and/or reproductive harm.
Clean Air Act – Section 112:	HYDROCHLORIC ACID (7647-01-0)
Title V:	HYDROCHLORIC ACID (7647-01-0) HYDROGEN SULFIDE (7783-06-4)
SC Toxic Air Pollutants List:	HYDROCHLORIC ACID (7647-01-0) HYDROGEN SULFIDE (7783-06-4)
Sara Title II – Section 313:	There are no known ingredients subject to reporting.
TSCA Inventory Status:	All ingredients of this product are listed.

Section 16: Other information

Indication of changes

NFPA health hazard:	1
NFPA fire hazard:	1
NFPA reactivity:	0
Personal Protection Index:	1

HMIS III Rating

Health:	1
Flammability:	1
Reactivity:	0
Special Hazard:	None

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.