SAFETY DATA SHEET



1. Identification

Product identifier CQS-1HP
Other means of identification Not available.
Recommended use Not available.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer: Ergon Asphalt & Emulsions, Inc.

Address: P. O. Box 1639

Jackson, MS 39215-1639

Website: www.ergonasphalt.com

Telephone: 1-800-222-7122 (Customer Service)

E-mail: sds@ergon.com

24 hour Emergency North America 1-800-424-9300; International 1-703-527-3887

(CHEMTREC):

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.

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)

None known.

Supplemental information Vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN

SULFIDE (H2S) can be harmful or fatal if inhaled.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------|--------------------------|------------|---------|
| ASPHALT | | 8052-42-4 | 50 - 70 |
| WATER | | 7732-18-5 | 20 - 40 |
| HYDROCHLORIC ACID | | 7647-01-0 | < 3 |

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.

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.

Material name: CQS-1HP SDS US

Most important

symptoms/effects, acute and

delayed

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

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Dry chemical powder. Carbon dioxide (CO2).

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.

Direct contact with eyes may cause temporary irritation.

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 measures

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. For waste disposal, see section 13 of the SDS. 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. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze.

Value

8. Exposure controls/personal protection

Occupational exposure limits

| US. OSHA Table Z-1 Lim | its for Air Contaminants (29 CFR 1910.1000) |
|------------------------|---|
| Components | Туре |

HYDROCHLORIC ACID (CAS Ceiling 7 mg/m3 7647-01-0) 5 ppm

US. ACGIH Threshold Limit Values

| Components | Туре | Value | Form |
|-------------------------|------|-----------|---------------------|
| ASPHALT (CAS 8052-42-4) | TWA | 0.5 mg/m3 | Inhalable fraction. |

Material name: CQS-1HP SDS US

US. ACGIH Threshold Limit Values Components **Type Value**

HYDROCHLORIC ACID (CAS Ceiling 2 ppm

7647-01-0)

US. NIOSH: Pocket Guide to Chemical Hazards

Components **Type Value Form** ASPHALT (CAS 8052-42-4) Ceiling 5 mg/m3 Fume. HYDROCHLORIC ACID (CAS 7 mg/m3 Ceiling 7647-01-0) 5 ppm

Form

Biological limit values No biological exposure limits noted for the ingredient(s).

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined Appropriate engineering

controls occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style

gloves.

Other Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged

vapor contact. Plastic or rubber gloves, apron and boots.

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.

General hygiene Always observe good personal hygiene measures, such as washing after handling the material and considerations before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

9. Physical and chemical properties

Appearance Brown to black in color.

Physical state Liquid. Liquid. Form Color Black. Odor Tar-like **Odor threshold** Not available.

2.1 - 4

Melting point/freezing point -173.6 °F (-114.22 °C) estimated

Initial boiling point and

boiling range

212 °F (100 °C) estimated

Flash point 400.0 °F (204.4 °C) estimated

Evaporation rate < 1

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower

(%)

Not available.

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Vapor pressure < 1 mm Hg estimated

Vapor density > 1

Not available. Relative density

Solubility(ies)

Not available.

Partition coefficient

Solubility (water)

Auto-ignition temperature

Not available.

(n-octanol/water)

> 700 °F (> 371.11 °C) estimated

Material name: COS-1HP SDS US **Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Density 8.42 lb/gal estimated **Flammability class** Combustible IIIB estimated

Percent volatile < 2 % estimated **Specific gravity** 1.01 estimated

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable under normal temperature conditions. **Possibility of hazardous** Hazardous polymerization does not occur.

reactions

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat

product.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or

products low molecular weight hydrocarbons. Hydrogen sulfide.

11. Toxicological information

Information on likely routes of exposure

IngestionExpected to be a low ingestion hazard.InhalationProlonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Snacias

Eye contact Harmful in contact with eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Droduct

| Toduct Species | | rest results | |
|-----------------------|---------|-----------------------|--|
| CQS-1HP (CAS Mixture) | | | |
| Acute | | | |
| Oral | | | |
| LD50 | Rabbit | 90000 mg/kg estimated | |
| Components | Species | Test Results | |

HYDROCHLORIC ACID (CAS 7647-01-0)

Dermal

LD50 Mouse 1449 mg/kg

Inhalation

LC50 Mouse 1108 ppm, 1 Hours

Rat 3124 ppm, 1 Hours

Tost Posults

Oral

LD50 Rabbit 900 mg/kg

Other

LD50 Mouse 1449 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

Harmful in contact with eyes. None known.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization May cause skin disorders if contact is repeated or prolonged.

Material name: CQS-1HP SDS US

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

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity 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. Overall Evaluation of Carcinogenicity

ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans.

HYDROCHLORIC ACID (CAS 7647-01-0) 3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Not classified. Specific target organ toxicity

Not classified.

- single exposure

Not classified.

Specific target organ toxicity - repeated exposure

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

Ecotoxicity Not expected to be harmful to aquatic organisms.

| Product | | Species | Test Results |
|-----------------------|------|---------|--------------------------------|
| CQS-1HP (CAS Mixture) | | | |
| Fish | LC50 | Fish | 28200 mg/l, 96 hours estimated |
| Components | | Species | Test Results |

HYDROCHLORIC ACID (CAS 7647-01-0)

Aquatic

LC50 Fish Western mosquitofish (Gambusia affinis) 282 mg/l, 96 hours

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

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Material name: COS-1HP SDS US

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

Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulations All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ASPHALT (CAS 8052-42-4) Listed. HYDROCHLORIC ACID (CAS 7647-01-0) Listed.

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

HYDROCHLORIC ACID (CAS 7647-01-0) 5000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name CAS number Reportable Threshold Threshold Threshold quantity planning quantity planning quantity, lower quantity, upper value value

HYDROCHLORIC ACID 7647-01-0 5000 500 lbs

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.HYDROCHLORIC ACID7647-01-0< 3</td>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

HYDROCHLORIC ACID (CAS 7647-01-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

HYDROCHLORIC ACID (CAS 7647-01-0) **Safe Drinking Water Act** Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)

HYDROCHLORIC ACID (CAS 7647-01-0)

DEA Essential Chemical Code Number

HYDROCHLORIC ACID (CAS 7647-01-0) 6545

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

HYDROCHLORIC ACID (CAS 7647-01-0) 20 %WV

DEA Exempt Chemical Mixtures Code Number

HYDROCHLORIC ACID (CAS 7647-01-0) 6545

US state regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

ASPHALT (CAS 8052-42-4)

HYDROCHLORIC ACID (CAS 7647-01-0)

US. New Jersey Worker and Community Right-to-Know Act

HYDROCHLORIC ACID (CAS 7647-01-0) 500 LBS

US. Pennsylvania RTK - Hazardous Substances

ASPHALT (CAS 8052-42-4)

HYDROCHLORIC ACID (CAS 7647-01-0)

US. Rhode Island RTK

HYDROCHLORIC ACID (CAS 7647-01-0)

Material name: CQS-1HP SDS US

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| 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) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| 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 04-06-2015

Version # 01

Further information HMIS® is a registered trade and service mark of the NPCA.

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.

Material name: CQS-1HP SDS US