

SAFETY DATA SHEET

1. Identification

Product identifier **DISSCO® CSS1h Emulsified Asphalt**
Other means of identification Tack Coat, Asphalt Emulsion, Emulsified Asphalt
Recommended use Used as a prime or tack coat under and/or around asphalt paving and patching.
Recommended restrictions Not known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Manufacturer: **DISSCO®** - Denver Industrial Sales and Service Co.
Address: 850 South Lipan Street
Denver, CO 80223
Contact Name: Todd Mellema
Telephone: 303-935-2485
E-mail: todd@dissco.net
INFOTRAC: 1-800-535-5053

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 0
Health hazards	Specific target organ toxicity, single exposure	Category 1
Environmental hazards	Not classified	Category 0
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 contents/container in accordance with local/regional/national/international regulations. See section 13 of this SDS for disposal instructions.

Hazard(s) not otherwise None known

Classified (HNOC)

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	30 - < 40
HYDROCHLORIC ACID		7647-01-0	< 2

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Composition comments Components not listed are either non-hazardous or below the required disclosure threshold.

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.

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

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 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.

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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,

Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in

Including any Incompatibilities

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.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
HYDROCHLORIC ACID (CAS 7647-01-0)	Ceiling	7 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
ASPHALT (CAS 8052-42-4) (CAS 8008-20-6)	TWA	0.5 mg/m3	Inhalable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
HYDROCHLORIC ACID (CAS 7647-01-0)	Ceiling	2 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

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

Biological limit values

No biological exposure limits noted for the ingredient(s)

Appropriate engineering

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Controls

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 hazard	Wear appropriate thermal protective clothing, when necessary.
General hygiene	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Considerations	

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
pH	2.1 - 4
Melting point/freezing point	150 - 180 °F (65.56 - 82.22 °C) / -173.6 °F (-114.22 °C) estimated
Initial boiling point and boiling range	212°F (100°C)
Flash point	400.0 °F (204.4 °C) Cleveland Open Cup
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 @ 70°C
Vapor density	> 1
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)
Decomposition temperature	Not available
Viscosity	20 – 100 Saybolt Furol
Viscosity temperature	77°F (25° C)
Other information	
Flammability class	Flammable IIIB
Percent Volatile	< 2%
Specific gravity	1.0 - 1.03

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10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical stability	Stable at 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

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
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 Not available

Product	Species	Test Results
CSS-1H (CAS Mixture)		
Acute		
Inhalation		
LC50	Mouse	79142.8594 ppm, 1 Hours estimated
Oral		
LD50	Mouse	2390 g/kg estimated
	Rabbit	64285.7148 mg/kg estimated
	Rat	2140 g/kg estimated

Components	Species	Test Results
HYDROCHLORIC ACID (CAS 7647-01-0)		
Acute		
Dermal		
LD50	Mouse	1449 mg/kg
Inhalation		
LC50	Mouse	1108 ppm, 1 Hours
	Rat	3124 ppm, 1 Hours
Oral		
LD50	Rabbit	900 mg/kg
Other		
LD50	Mouse	1449 mg/kg

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

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Harmful in contact with eyes. None known.

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Respiratory or skin sensitization

Respiratory sensitization Not available

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

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 bitumen's 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

Specific target organ toxicity Not available

- repeat exposure

Aspiration hazard Not classified

Chronic effects Prolonged exposure may cause chronic effects

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms

Product	Species	Test Results
CSS1h (CAS Mixture)		
Fish	LC50 Fish	2437.7026 mg/l, 96 hours estimated
Product	Species	Test Results
HYDROCHLORIC ACID (CAS 7647-01-0)		
Aquatic		
FISH	LC50 Western Mosquitofish (Gambusia 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

Bio-accumulative potential Not available

Mobility in soil Not 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 D001: Waste Flammable material with a flash point <140° F

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 instruction). 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.

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14. Transport information

DOT

UN number	Not Regulated as dangerous goods
UN proper shipping name	ASPHALT EMULSION
Transport hazard class(es)	
Class	Not Regulated as dangerous goods
Subsidiary risk	-
Label(s)	Not Regulated as dangerous goods
Packing group	None
Special precautions for user	Not available
Special provisions	None
Packaging exceptions	none
Packaging non bulk	None
Packaging bulk	none

IATA

UN number	Not Regulated as dangerous goods
UN proper shipping name	ASPHALT EMULSION
Transport hazard class(s)	
Class	Not Regulated as dangerous goods
Subsidiary risk	-
Packing group	Not Regulated as dangerous goods
Environmental hazards	Not Regulated as dangerous goods
ERG Code	Not Regulated as dangerous goods
Special precautions for user	Not available
Other information	
Passenger and cargo Aircraft	Not Regulated as dangerous goods
Cargo aircraft only	Not Regulated as dangerous goods

IMDG

UN number	Not Regulated as dangerous goods
UN proper shipping name	ASPHALT EMULSION
Transport hazard class(es)	
Class	Not Regulated as dangerous goods
Subsidiary risk	-
Packing group	Not Regulated as dangerous goods
Environmental hazards	
Marine pollutant	No
EmS	Not available
Special precautions for user	Not available

Transport in bulk according to Annex II of MARPOL 73/78 And the IBC Code Not available

15. Regulatory information

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

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TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. 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 (29CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard – Yes
Delayed Hazard – No
Fire Hazard – Yes
Pressure Hazard – No
Reactivity Hazard – No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
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HYDROCHLORIC ACID 7647-01-0 5000 500 lbs

SARA 311/312 No

Hazardous chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
HYDROCHLORIC ACID	7647-01-0	< 2

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® Accidental Release Prevention (40 CFR 68.130)

HYDROCHLORIC ACID (CAS 7647-01-0)

Safe Drinking Water Act (SDWA) Not Regulated

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)

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HYDROCHLORIC ACID (CAS 7647-01-0)

US Rhode Island RTK

HYDROCHLORIC ACID (CAS 7647-01-0)

US California Proposition 65

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" indicated 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 12-11-2014

Revision date 05-20-2019

Version # 01

References ACGIH

EPA: AQUIEW 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.

Revision Information Composition / Information on Ingredients: Disclosure Overrides

Physical & Chemical Properties: Multiple Properties

GHS: Classification

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