

H.M.I.S. RATING	
Health	2
Flammability	1
Reactivity	0
Protective Equip.	Ε

Material Safety Data Sheet - OSHA 174

Material Safety Data Sheet

May be used to comply with OSHA's Hazard communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

US Department of Labor

Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072

CQS for Chip Seal Asphalt Emulsion

SECTION I - Manufacturer / Product Information

Manufacturer's Name:Emergency Telephone No.: Chemtrec: 1-800-424-9300SealMaster HawaiiTelephone Number for Information: 1-808-839-2782

Address: 2927 Mokumoa Street Date Prepared: November 4, 2011

Honolulu, HI 96819-4404

IngredientCAS #OSHA_PELACGIH_TLVOther LimitsPercentAsphalt8052-42-4N/A5 mg/m3Proprietary Water MixtureN/AN/A

SECTION III - Physical / Chemical Characteristics

Boiling Point: $>100^{\circ}$ Celsius (212° Fahrenheit) **Specific Gravity (H₂0 = 1):** 1.01

Vapor Pressure (mm Hg): Nearly equal to water.

Vapor Density (AIR = 1): <1

Solubility in Water): Easily dispersible in the liquid state.

Melting Point: N/A
% Volatile: <2%
Evaporation Rate: <1

Appearance and Odor: Black liquid, mild asphaltic odor.

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used): 400°F (204°C) LEL: N/A Flammability

Auto Ignition Temperature: >700°F (>370°C) UEL: N/A Classification: Class IIIB

Extinguishing Media: Foam, CO₂, dry chemical, water fog, other.

Special Fire Fighting Procedures: Full protective equipment, including self-contained breathing apparatus to be worn. Water cool sealed containers in area of fire to prevent rupture due to steam generation.

Unusual Fire and Explosion Hazards: N/A

SECTION V - Reactivity Data

Stability: Unstable: Stable: X Conditions to Avoid: Keep from freezing and extreme heat. Incompatibility (Materials to Avoid): Strong oxidizers; Anionic emulsions.

Hazardous Decomposition or Byproducts: Combustion may yield fumes, smoke, carbon monoxide,

carbon dioxide and other toxic pyrolysis products.

Hazardous Polymerization: May Occur: Will Not Occur: X Conditions to Avoid: N/A

SECTION VI - Health Hazard Data

Skin Contact? No **Route(s) of Entry:** Inhalation? Yes **Ingestion?** Yes **Eye Contact?** Yes **Health Hazards (Acute and Chronic):**

(Acute): Dizziness, weakness, nausea, headache.

(Chronic): Gastrointestinal irritation – prolonged or repeated exposure to high vapor concentrations may cause damage to kidneys, liver, lungs, blood, or central nervous system. Repeated ingestion may cause liver damage.

Carcinogenicity: Not a know NTP? No **IARC Monographs?** No **OSHA Regulated?** No

human carcinogen

Signs and Symptoms of Exposure:

Inhalation: Vapor could cause headache, irritation to nose and throat, dizziness, weakness and nausea.

Ingestion: Can cause nausea, vomiting, diarrhea. May cause thermal burns.

Skin: Not easily absorbed – prolonged or repeated exposure may be mildly irritating to the skin. May cause allergic skin reactions in some people

Eve: Irritation from vapor or liquid.

Medical Conditions Generally Aggravated by Exposure: None known.

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial resuscitation. IMMEDIATELY CALL A PHYSICIAN.

Ingestion: If vomiting begins, keep head below hips to avoid aspiration into lungs. DO NOT INDUCE VOMITING. Give victim a glass of water or milk. Never give anything by mouth to an unconscious person. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

Skin Contact: Wash area with soap and water. Remove contaminated clothing. IF IRRITATION OCCURS, CALL A PHYSICIAN

Eye Contact: Gently flush with large amounts of water for at least 15 minutes or until eye is clear. IMMEDIATELY CALL A PHYSICIAN.

SECTION VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Dike and contain spill with inert material (sand, sawdust, diamateous earth, etc.). Ventilate area and avoid breathing vapors or mists. Pump liquid into storage tanks. Remaining liquid may be taken up with inert materials. Place in closed container for proper disposal. Do not release into sewers or waterways.

Waste Disposal Method: Dispose of in accordance with Local, State, and Federal regulations. This material is not a hazardous waste as defined in RCRA.

Precautions to Be Taken in Handling and Storage: Keep container closed and upright to prevent leakage. Avoid freezing or temperatures above 50° Celsius.

Other Precautions: Do not take internally. Keep away from children. Avoid breathing vapors. For external use only.

SECTION VIII - Control Measures

Respiratory Protection (Specify Type): None required if good ventilation is maintained. Otherwise use NIOSH approved respirator designed to remove particles and vapor.

Ventilation: Local Exhaust: Yes Special: N/A Mechanical (General): N/A Other: N/A

Protective Gloves: Yes **Eye Protection:** Yes

Other Protective Clothing or Equipment: A rubber apron is recommended to protect clothing from splash during application.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Work/Hygienic Practices: Do not apply during or just before (within one hour) of rain to avoid contamination of runoff water. Never eat, drink, or smoke in work areas. Wash hands before eating.

SECTION IX - Ecological Data

Ecotoxicity: No Data **Environmental Fate:**

Environmental Transport: No Data Environmental Degradation: No Data Soil Absorption/Mobility: No Data

SECTION X - Transportation Data

Shipping Name: Asphalt Emulsion

Not Regulated **Shipping Symbols:** N/A

Hazard Class: N/A

ID No.: N/A

Packaging Group: N/A

Label: N/A

Special Provisions (172.102): N/A

Packaging Authorizations:

a) Exceptions: N/A

b) Non-bulk Packaging: N/A

c) Bulk Packaging: N/A

Quantity Limitations:

a) Passenger, Aircraft, or Railcar: N/A

b) Cargo Aircraft Only: N/A

Vessel Stowage Requirements:

a) Vessel Stowage: N/A

b) Other: N/A

SECTION XI - Regulatory Data

EPA Regulations:

RCRA

RCRA Hazardous Waste Number: Not listed.

RCRA Hazardous Waste Classification (40 CFR 261): This material should not be hazardous due to characteristics.

CERCLA

CERCLA: Not listed.

CERCLA Reportable Quantity (RQ): This material is not a listed hazardous substance and does not have a reportable quantity. However, if spilled into waters of the U.S., it may be reportable under the Clean Water Act.

SARA

SARA 311/312 Codes: Not Listed. SARA Toxic Chemical: Not Listed.

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

OSHA Regulations

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): See Table in Section 2.

OSHA Specifically Regulated Substance: No

State Regulations: Listed in state hazardous substance list for CA and MN as Asphalt (petroleum fumes); FL, MA, NJ as Asphalt fumes; and PA as Asphalt.

Additional Hazard Rating Systems: NAS Hazard Rating for Bulk Water Transportation of Asphalt:

Fire -1, Health -2, Water Pollution -1, Reactivity -0.

SECTION XII - Disclaimer

All information, recommendations, and suggestions concerning this product are based upon tests, literature references, and/or calculations believed to be reliable. The manufacturer makes no guarantee, expressed or implied, as to the effect of use, or the safety and toxicity of the product. The information contained in this sheet cannot be taken as the sum total of all protective measures to be taken.