

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: MA-88 Citrus Flash Mastic Remover
Product Code: B8708
MSDS Date: November 7, 2014

Mast-Away Division
2101 Clifton Ave
St. Louis, MO 63139

General Information: 314-644-1300
CHEMTREC: 800-424-9300

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

GHS Classification:

Flammable liquids (Category 3)
Skin irritation (Category 2)
Serious eye damage (Category 1)
Specific target organ toxicity, single exposure (Category 3)
Aspiration hazard (Category 1)
Skin sensitization (Category 1)

GHS Labeling



Symbol:

Signal Word: Warning

Hazard Statements:

Flammable liquid and vapor
Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation
May be fatal if swallowed and enters airways
May cause an allergic skin reaction

Precautionary Statements:

Prevention:

Avoid breathing mist/vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Ground/bond container and receiving equipment.
Keep away from heat/sparks/open flames/hot surfaces-no smoking.
Keep container tightly closed.
Take precautionary measure against static discharge.
Use only non-sparking tools.

Use only outdoors or in a well-ventilated area.
 Wash thoroughly after handling.
 Wear protective gloves/eye protection/face protection

Response:

Call a poison center/doctor if you feel unwell.
 Do NOT induce vomiting.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water shower.
 If on skin: Wash with plenty of water.
 If skin irritation or rash occurs: Get medical advice/attention.
 If swallowed: Immediately call a poison center/doctor.
 In case of fire: Use Water fog. Foam. Carbon dioxide (CO2). Alcohol resistant foam. Powder. Dry chemicals to extinguish.
 Take off contaminated clothing and wash it before reuse.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Keep cool.
 Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Potential Health Effects: See Section 11 for more information

This product does not contain carcinogens or potential carcinogens as listed by NTP or ACGIH.

This material contains components that are considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: See Section 12 for more information.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

| No. | Component CAS REG. NO. | Amount % | OSHA | | ACGIH | |
|-----|--|----------|-----------|-----------|-----------|-----------|
| | | | TWA | STEL | TWA | STEL |
| 1 | Hydrotreated Light Distillates (petroleum) CAS # 64742-47-8 | 50-100 | Not Avail | Not Avail | 200 ppm | Not Avail |
| 2 | Limonene, D- CAS # 5989-27-5 | 1-50 | Not avail | Not avail | 30 ppm | Not avail |
| 3 | Ethoxylated Nonylphenol CAS # 9016-45-9 | 1-10 | Not Avail | Not Avail | Not Avail | Not Avail |

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

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.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

Ingestion Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. If ingestion of a large amount does occur, call a poison control center immediately.

General advice If you feel unwell, seek medical advice (show the label where possible).

Section 5: FIRE FIGHTING MEASURES

Flash Point (Limonene, D) 48.88°C (120°F) Pensky Martens closed cup

LEL (Limonene, D): 0.7% (V)

UEL (Limonene, D): 6.1% (V)

Auto Ignition Temperature: 458°F / 237°C

NFPA Classification: Combustible Liquid Class II

Suitable Extinguishing Media:

Water fog. Foam. Carbon dioxide (CO2). Alcohol resistant foam. Powder. Dry chemicals.

Unsuitable Extinguishing Media:

Water. Do not use water jet as an extinguisher, as this will spread the fire.

Products of Combustion:

May produce irritating, corrosive, and or toxic gases.

Fire Fighting Equipment/Instructions:

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. In case of fire and/or explosion do not breathe fumes. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. In the event of fire and/or explosion do not breathe fumes.

| HAZARD | HMIS | NFPA |
|------------|------|------|
| Toxicity | 1 | 1 |
| Fire | 2 | 2 |
| Reactivity | 0 | 0 |

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: Keep unnecessary personnel away. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Method for Containment: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Small Spills: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Methods for Clean-up: Ventilate area of leak or spill. Use spark-proof tools to sweep or scrape up and containerize in approved chemical waste container.

Section 7: HANDLING AND STORAGE

Handling:

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. All equipment used when handling the product must be grounded. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid prolonged or repeated contact with skin. Wear personal protective equipment. Do not use in areas without adequate ventilation. Wash thoroughly after handling. Avoid release to the environment.

Storage:

Store locked up. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep container tightly closed. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment (PPE)

Respirator Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eye/Face Protection: Chemical goggles. Face-shield. Eye wash fountain is recommended.

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Protective Equipment:

When using do not smoke. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

See section 3 for exposure limits.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance, State: Product is water-white to pale straw liquid.
Color: Colorless to pale straw
Odor: Hydrocarbon
pH: Not Available
Vapor Density: Not Available
Boiling Point Hydrotreated Light Distillates (petroleum): >455°F
Vapor Pressure Hydrotreated Light Distillates (petroleum): 0.0382 torr CLC
Freezing point Not Available
Flash Point (See Section 5)
Flammability Properties (See section 5)
Solubility (in water) Not available
Density Hydrotreated Light Distillates (petroleum): 0.8269 g/cm³
Evaporation Rate
Octanol/Water partition coefficient (Kow): Not Available
Auto-ignition temperature: Not Available
Decomposition temperature: Not Available
Viscosity Hydrotreated Light Distillates (petroleum): 2.87 cDt

Section 10: STABILITY AND REACTIVITY

Stability: This material is considered stable at ambient temperatures 70°C (21°C).
Condition to Avoid: Heat, flames and sparks. Avoid temperatures exceeding the flash point.

Incompatible Materials: Oxidizing materials

Hazardous Decomposition: Not Available

Hazardous Reactions: This product will not undergo polymerization.

Section 11: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Component Analysis LD50

Limonene-D (5989-27-5)
Oral LD50 Rat 4400 mg/kg;
Dermal LD50 Rabbit >2000 mg/kg

CHRONIC EFFECTS:

Component

Hydrotreated Light Distillates (petroleum) (64742-47-8)

Carcinogenic Effects NTP: Not a carcinogen by IARC, ACGIH, NTP, or OSHA.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available

Developmental Toxicity: Not Available

Target Organs: Eyes Causes eye irritation.

Skin Causes skin irritation.

Inhalation May cause irritation of respiratory tract.

Ingestion Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Ethoxylated Nonylphenol (CAS # 9016-45-9)

Carcinogenic Effects: Not a carcinogen by IARC, ACGIH, NTP, or OSHA.

Mutagenic Effects: Not Available.
Teratogenic Effects: Not Available
Developmental Toxicity: Not Available
Target Organs: **Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion Harmful if swallowed.
Skin Harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation.

Limonene-D (5989-27-5)

Carcinogenic Effects NTP: Not listed as a carcinogen by IARC, NTP, or OSHA.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available

Developmental Toxicity: This component has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Target Organs: Exposure to this component has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs specific to the male rat and the kidney effects are not expected to occur in humans. Overexposure to this component has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible, kidney effects. **Eye contact:** May cause mild eye irritation. Symptoms include stinging, tearing, and redness. **Skin contact:** May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling, and other skin effects.) Passage of this material into the body through the skin is possible, but it unlikely that this would result in harmful effects during safe handling and use. **Ingestion:** Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. **Inhalation:** Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable. **Aggravated Medical Condition:** Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions). **Symptoms:** Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways).

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Hydrotreated Light Distillates (petroleum) (64742-47-8)
LC50 Rainbow trout, Donaldson trout (*Oncorhynchus mykiss*): 2.9 mg/l 96 hours

Ecotoxicity: Ethoxylated Nonylphenol (CAS # 9016-45-9)
mortality LOEC - *Pimephales promelas* (fathead minnow) - 2.0 mg/l - 144 h
mortality NOEC - *Pimephales promelas* (fathead minnow) - 1.8 mg/l - 144 h LC50 - *Lepomis macrochirus* (Bluegill) - 1.0 - 9.7 mg/l - 96 h
mortality NOEC - *Daphnia magna* (Water flea) - 10.0 mg/l - 144 h
mortality LOEC - *Daphnia magna* (Water flea) - 20.0 mg/l - 144 h EC50 - *Daphnia magna* (Water flea) - 12.2 - 17.0 mg/l - 48 h
Growth inhibition LOEC - *Pseudokirchneriella subcapitata* - 16.0 mg/l - 96 h
Growth inhibition NOEC - *Pseudokirchneriella subcapitata* - 8.0 mg/l - 96 h

Ecotoxicity: Limonene-D (CAS#5989-27-5)
96 Hr LC50 *Pimephales promelas*: 0.619-0.796 mg/L [flow-through];
96 Hr LC50 *Oncorhynchus mykiss*: 35 mg/L

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations.

Section 14: TRANSPORT INFORMATION

Proper Shipping Name: Combustible liquid, n.o.s.

Hazard Class: Comb Liq

Identification No.: NA1993

Packing Group: III

Label: Combustible (bulk)

Section 15: REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 313: This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372 -Table 372.65). No components were identified.

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: No components were identified.

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: Immediate (Acute) Health Hazard, Chronic Health Hazard, Fire Hazard

California Prop 65: No components were identified.

Section 16: OTHER SUPPLEMENTAL INFORMATION

Prepared by: Chemisphere Corp. on 5/20/14

Disclaimer:

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