

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Product Name: MA-44 Low Odor Plus Mastic Remover
Product Code: B8701
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 4)
Skin irritation (Category 2)
Serious eye damage (Category 1)
Acute toxicity, Inhalation (Category 3)
Specific target organ toxicity, single exposure (Category 3)
Aspiration hazard (Category 1)
Carcinogenicity (Category 2)

GHS Labeling



Symbol:

Signal Word: Danger

Hazard Statements:

Combustible liquid
Causes serious eye damage.
Causes skin irritation
Toxic if inhaled.
May cause drowsiness or dizziness
May be fatal if swallowed and enters airways
Suspected of causing cancer

Precautionary Statements:

Prevention:

Keep away from flames/hot surfaces. No smoking.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing mist/vapors/spray.
Use only outdoors or in well-ventilated area.
Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.
 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF ON SKIN: Wash with plenty of water.
 Take off contaminated clothing and wash before reuse.
 In case of fire: consider carbon dioxide, dry chemical powder, dry sand, limestone powder, or alcohol resistant foam to extinguish.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately seek medical attention.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if you feel unwell.
 If skin irritation occurs: Get medical advice/attention.
 If swallowed: Immediately call a poison center/doctor.
 If exposed or concerned: Get medical advice/attention.
 Do not induce vomiting.

Storage:

Store in a well-ventilated place. Keep cool. Keep container tightly closed.
 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 contains carcinogens or potential carcinogens as listed by NTP, ACGIH, or OSHA.

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	2-Butoxyethanol CAS # 111-76-2	1-20	50 ppm	Not avail	20 ppm	Not avail
2	Hydrotreated Light Distillates (petroleum) CAS # 64742-47-8	1-100	Not Avail	Not Avail	200 ppm	Not Avail
3	Ethoxylated Nonylphenol CAS # 9016-45-9	1-20	Not Avail	Not Avail	Not Avail	Not Avail
4	1,2-Dimethyl-4-ethylbenzene CAS # 934-80-5	1-20	Not Avail	Not Avail	Not Avail	Not Avail
5	1,2,3,5-tertramethylbenzene CAS # 527-53-7	1-20	Not Avail	Not Avail	Not Avail	Not Avail
6	1,2,4,5-tetramethylbenzene CAS # 95-93-2	1-20	Not Avail	Not Avail	Not Avail	Not Avail

7	1,3-Dimethyl-4-ethylbenzene CAS # 874-41-9	1-20	Not Avail	Not Avail	Not Avail	Not Avail
8	1,3-Dimethyl-5-ethylbenzene CAS # 934-74-7	1-20	Not Avail	Not Avail	Not Avail	Not Avail
9	1,4-Dimethyl-2-ethylbenzene CAS # 1758-88-9	1-20	Not Avail	Not Avail	Not Avail	Not Avail
10	1-methyl-3-propylbenzene CAS # 1074-55-1	1-20	Not Avail	Not Avail	Not Avail	Not Avail
11	Naphthalene CAS # 91-20-3	1-20	Not Avail	Not Avail	10 ppm	15 ppm

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

- Inhalation:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion:** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Eyes:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Note to physician: Symptoms may be delayed

Section 5: FIRE FIGHTING MEASURES

Flash Point (Hydrotreated Light Distillates): >142°F (TCC) = 61°C
Auto-ignition Temperature (Hydrotreated Light Distillates): 236°C (456.8°F)
Lower Explosion Limit: 0.6%
Upper Explosion Limit: 5.5%

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	2	2
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)

Respiratory 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 Hydrotreated Light Distillates (petroleum): 4.5 [Air=1]

Boiling Point Hydrotreated Light Distillates (petroleum): >374°F

Vapor Pressure Hydrotreated Light Distillates (petroleum): 0.54 mm of Hg (@room temperature)

Freezing point Hydrotreated Light Distillates (petroleum): -58°C (-72.4°F)

Flash Point (See Section 5)

Flammability Properties (See section 5)

Solubility (in water) Negligible

Specific Gravity Hydrotreated Light Distillates (petroleum): 0.78

Evaporation Rate Hydrotreated Light Distillates (petroleum): 0.03

Octanol/Water partition coefficient (Kow): Not Available

Auto-ignition temperature: Not Available

Decomposition temperature: Not Available

Viscosity: Kinematic (40ac (104aF)): 0.0134 cm²/s (1.34 cSt)

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**

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

Acute Dermal LD50 Rabbit: > 2000 mg/kg

Acute Inhalation LC50 Rat: > 5.2 mg/l 4 Hours

Acute Oral LD50 Rat: > 5000 mg/kg

2-Butoxyethanol (CAS # 111-76-2)

LD50 Dermal Rabbit 4.0 g/kg

LC-50 Inhalation Sat Air (18 ppm) – no deaths (Rat) 7 hours

LD50 Oral Rat 5.1 g/kg

solvent naphtha (petroleum), heavy arom.

LD50 Dermal Rabbit >2 mL/kg -

LC50 Inhalation Vapor Rat >590 mg/m³ 4 hours

1,2,3,5-tetramethylbenzene (CAS # 527-53-7)

LD50 Oral Rat 5157 mg/kg -

1,2,4,5-tetramethylbenzene (CAS # 95-93-2)

LD50 Oral Rat 6700 mg/kg -

LD50 Oral Rat 6989 mg/kg -

naphthalene (CAS # 91-20-3)

LD50 Dermal Rabbit >20 gm/kg -

LD50 Dermal Rat >2500 mg/kg -

LD50 Oral Rat 490 mg/kg -

1,2,4-trimethylbenzene

LD50 Oral Rat 5 g/kg -

LC50 Inhalation Vapor Rat 18000 mg/m³ 4 hours

2-methylnaphthalene

LD50 Intraperitoneal Rat 1.63 gm/kg -

LD50 Oral Rat 1630 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: Toxic by inhalation.

Routes of exposure Inhalation.

Eyes Causes eye irritation. Avoid contact with eyes.

Skin Avoid contact with the skin. Causes skin irritation.

Inhalation Toxic by inhalation. Can cause central nervous system (CND) depression. Do not breathe dust/fume/gas/mist/vapors/spray.

Ingestion Do not ingest. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed. Can cause central nervous system (CND) depression.

2-Butoxyethanol (CAS # 111-76-2)

Carcinogenic Effects: IARC 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol)

Mutagenic Effects: Not Available.

Teratogenic Effects: Has shown teratogenic effects in laboratory animals

Developmental Toxicity: Not Available

Target Organs: Blood, kidneys, liver, lymphatic system, central nervous system (CNS). **Inhalation:** Causes irritation to the respiratory tract. Symptoms may include sore throat, coughing, headache, nausea and shortness of breath. High concentrations have a narcotic effect. **Ingestion:** Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. Toxic! May cause systemic poisoning with symptoms paralleling those of inhalation. **Skin Contact:** May cause irritation with redness and pain. May be absorbed through the skin with possible systemic effects. **Eye Contact:** Vapors are irritating and may produce immediate pain, redness and tearing. Splashing can cause severe pain, stinging, swelling. **Chronic Exposure:** Prolonged or repeated exposures can cause damage to the liver, kidneys, lymphoid system, blood and blood-forming organs. **Aggravation of Pre-Existing Conditions:** Persons with pre-existing skin disorders, eye problems, impaired liver, kidney, blood, respiratory or lymphoid system function may be more susceptible to the effects of the substance.

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.

1,2,3,5-tetramethylbenzene (CAS # 527-53-7)

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 May be harmful if swallowed.

Skin Harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

prolonged or repeated exposure can cause:, Dermatitis, Nausea, Dizziness, Headache

Naphthalene (CAS # 91-20-3)

Carcinogenic Effects: IARC: 2B - Group 2B: Possibly carcinogenic to humans (Naphthalene) NTP: Reasonably anticipated to be a human carcinogen (Naphthalene)

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available

Developmental Toxicity: Not Available

Target Organs: Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in: cataracts, optic neuritis, corneal injury, Eye irritation, Ingestion may provoke the following symptoms: hemolytic anemia, hemoglobinuria, Nausea, Headache, Vomiting, Gastrointestinal disturbance, Convulsions, anemia, Kidney injury may occur., Seizures., Coma.

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:** 2-Butoxyethanol (CAS # 111-76-2)
96 hour *Lepomis macrochirus* (LC50) 1490 mg/l
- 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:** Naphthalene (CAS # 91-20-3)
LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.9 - 9.8 mg/l - 96.0 h
LC50 - *Pimephales promelas* (fathead minnow) - 1 - 6.5 mg/l - 96.0 h
NOEC - other fish - 1.8 mg/l - 3.0 d
LOEC - other fish - 3.2 mg/l - 3.0 d
EC50 - *Daphnia magna* (Water flea) - 1.00 - 3.40 mg/l - 48 h
Toxicity to algae EC50 - No information available. - 33.00 mg/l - 24 h

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). Naphthalene.

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: Naphthalene 91-20-3 100lbs.

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: Naphthalene cancer toxicity

Section 16: OTHER SUPPLEMENTAL INFORMATION

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

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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