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#### 1. Product and Company Identification

**Product Code:** 00091R03132017

Product Name: CITRUS ASSAULT MASTIC REMOVER

Company Name: TWIN-CHEMICALS, INC Phone Number: 6175 Hickory Flat Highway (800)442-4958

Suite 110-344 Canton, GA 30115

Web site address: www.twinchemicals.com
Email address: sales@twinchemicals.com

**Emergency Contact:** CHEMTREC (emergency only) (800)424-9300 **Information:** Sales & Information (800)442-4958

#### 2. Hazards Identification

Flammable Liquids, Category 3
Skin Corrosion/Irritation, Category 2

Skin Sensitization, Category 1

Aquatic Toxicity (Acute), Category 1

Serious Eye Damage/Eye Irritation, Category 2B

Aquatic Toxicity (Acute), Category 2
Aquatic Toxicity (Chronic), Category 2

**Aspiration Toxicity, Category 1** 









GHS Signal Word: Danger

GHS Hazard Phrases: H226 - Flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways.

H315+320 - Causes skin and eye irritation. H317 - May cause an allergic skin reaction.

H400 - Very toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

GHS Precaution Phrases: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or physician for treatment advice. Have product container or label with you when calling

poison control center or physician. P331 - Do NOT induce vomiting.

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P332+313 - If skin irritation occurs, get medical advice/attention.

P333+313 - If skin irritation or rash occurs, seek medical advice/attention.

P337+313 - If eye irritation persists, get medical advice/attention. P362 - Take off contaminated clothing and wash before re-use.

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

P370+378 - In case of fire, use water mist, carbon dioxide, foam, or powder to

extinguish.

**GHS Storage and Disposal** 

Phrases:

P403+235 - Store in cool/well-ventilated place.

P405 - Store locked up.

P501 - Dispose of contents/container to a licensed facility per local and state regulations.

Potential Health Effects (Acute and Chronic):

Chronic: In 2-year gavage studies, there was clear evidence of carcinogenic activity of d-limonene for male rats, as shown by increased incidences of tubular cell hyperplasia, adenomas, and adenocarcinomas of the kidney. There was NO evidence of carcinogenic

activity of d-limonene for female rats, for male mice, or for female mice.

**Inhalation:** Material is irritating to mucous membranes and upper respiratory tract. May be harmful if

inhaled.

**Skin Contact:** Causes skin irritation. May irritate sensitive individuals. Prolonged and/or repeated

contact may cause defatting of the skin and dermatitis. May cause skin irritation.

**Eye Contact:** Causes severe eye irritation.

**Ingestion:** May cause digestive tract disturbances. May be harmful if swallowed.

Prolonged or repeated exposure may cause allergic reactions in certain sensitive

individuals.

## 3. Composition/Information on Ingredients

CAS#	Hazardous Components (Chemical Name)	Concentration
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene}	90.0 -100.0 %
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha(nonylphenyl)omegahydr {Nonylphenol Ethoxylate}	2.0 -6.0 %

#### 4. First Aid Measures

**Emergency and First Aid** 

**Procedures:** 

In Case of Inhalation: If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical aid.

In Case of Skin Contact: In case of contact, immediately flush skin with soap and plenty of water. Remove

contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing

before reuse.

**In Case of Eye Contact:** In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes.

Get medical aid.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. If swallowed,

wash out mouth with water provided person is conscious. Call a physician.

Signs and Symptoms Of

Exposure:

Exposure can cause: Nausea, headache, and vomiting. To the best of our knowledge,

the chemical, physical, and toxicological properties have not been thoroughly

investigated.

Note to Physician: None known.

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#### 5. Fire Fighting Measures

> 48.00 C Method Used: Estimate Flash Pt: **Explosive Limits:** LEL: 0.7 UEL: 6.1

255.00 C Autoignition Pt:

Suitable Extinguishing Media: Use water fog, dry chemical, carbon dioxide or alcohol type foam. Suitable:

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand,

> MSHA/NIOSH (approved or equivalent), and full protective gear. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. This liquid floats on water and may travel to a source of ignition and spread fire. Protective Equipment: Wear self-contained breathing

apparatus and protective clothing to prevent contact with skin and eyes.

Flammable Properties and

Hazards:

No data available.

**Hazardous Combustion** 

**Products:** 

No data available.

#### 6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Forms smooth, slippery surfaces on floors, posing an accident risk. Remove all sources of ignition. Provide ventilation. PROCEDURE(S) OF PERSONAL

PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for cleaning up.

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area

and wash spill site after material pickup is complete.

## 7. Handling and Storage

Precautions To Be Taken in Handling:

Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Avoid breathing dust, mist, or vapor.

Precautions To Be Taken in Storing:

Keep away from heat, sparks and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Separate from oxidizing materials. Partially filled containers should be blanketed with nitrogen. Suitable:

# Exposure Controls/Personal Protection

o. Exposure Controls/Fersonal Frotection							
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits			
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cycloh exene {(R)-(+)-Limonene}	No data.	No data.	No data.			
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha(nonylphenyl)omegahydr {Nonylphenol Ethoxylate}	No data.	No data.	No data.			

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**Personal Protective Equipment Symbols:** 





Respiratory Equipment (Specify Type):

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Hand: Compatible chemical-resistant gloves.

Wear chemical splash goggles. Chemical safety goggles. **Eye Protection: Protective Gloves:** Wear appropriate protective gloves to prevent skin exposure. Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Wash thoroughly after handling.

**Engineering Controls** (Ventilation etc.):

Facilities storing or utilizing this material should be equipped with an eyewash facility and

a safety shower. Use adequate ventilation to keep airborne concentrations low.

Mechanical exhaust required. Safety shower and eye bath.

Work/Hygienic/Maintenance

Practices:

#### **Physical and Chemical Properties**

[ ] Gas [X] Liquid [ ] Solid **Physical States:** 

Clear liquid. Appearance and Odor:

Orange-Like Odor.

ΝE pH:

**Melting Point:** -74.00 C - 58.00 C **Boiling Point:** 175.00 C - 176.00 C

Flash Pt: > 48.00 C Method Used: Estimate

NA **Evaporation Rate:** 

Flammability (solid, gas): No data available.

LEL: 0.7 UEL: 6.1 **Explosive Limits:** 

Vapor Pressure (vs. Air or

mm Hg):

< 2 MM HG at 20.0 C

Vapor Density (vs. Air = 1): 0.838 - 0.843at 20.0 C

Specific Gravity (Water = 1): 0.84 at 20.0 C

Emulsifible Solubility in Water:

Saturated Vapor

Concentration:

NA

Octanol/Water Partition

No data.

Coefficient:

255.00 C Autoignition Pt: **Decomposition Temperature:** No data. Viscosity: Water thin

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## 10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]

Conditions To Avoid - ignition sources, Excess heat.

Instability:

Incompatibility - Materials To Strong acids.

Avoid:

Hazardous Decomposition or Carbon monoxide, irritating and toxic fumes and gases.

**Byproducts:** 

**Possibility of Hazardous** 

Will occur [ ] Will not occur [ X ]

Reactions:

Conditions To Avoid - No d

No data available.

**Hazardous Reactions:** 

## 11. Toxicological Information

**Toxicological Information:** No data available.

Carcinogenicity/Other CAS# 5989-27-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Information:

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene}	n.a.	3	n.a.	n.a.
9016-45-9	Poly(oxy-1,2-ethanediyl), .alpha(nonylphenyl)omegahydr {Nonylphenol Ethoxylate}	n.a.	n.a.	n.a.	n.a.

#### 12. Ecological Information

General Ecological Information:

Environmental: May bioconcentrate in aquatic organisms and fish. Has low mobility in soil and may rapidly volatilize in the atmosphere. Limonene can be readily degraded in

SOII.

Physical: No information available.

Other: Dipentene, which is optically inactive limonene, is a marine pollutant.

ELIMINATION.

## 13. Disposal Considerations

**Waste Disposal Method:** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed. Empty container may be recycled or disposed of as solid sanitary waste. Do not reuse container. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## **14. Transport Information**

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LAND TRANSPORT (US DOT):

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

**DOT Hazard Class:** 3 COMBUSTIBLE LIQUID

UN/NA Number: NA1993 Packing Group: III



LAND TRANSPORT (Canadian TDG):

**TDG Shipping Name:** DIPENTENE.

AIR TRANSPORT (ICAO/IATA):

5989-27-5

ICAO/IATA Shipping Name: Pesticides, liquid, toxic, flammable, n.o.s. [flash point not less than 23 degrees C]

## 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI)

(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene No No No ((R)-(+)-Limonene)

9016-45-9 Poly(oxy-1,2-ethanediyl), No No No

.alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol

Ethoxylate}

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

5989-27-5 (R)-1-Methyl-4-(1-methylethenyl)-cyclohexene CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

{(R)-(+)-Limonene} Inventory; CA PROP.65: No

9016-45-9 Poly(oxy-1,2-ethanediyl), CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

.alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Inventory, 8A PAIR, 12(b); CA PROP.65: No

Ethoxylate}

#### 16. Other Information

**Revision Date:** 03/13/2017

Hazard Rating System:



HMIS:

Additional Information About No data available.

This Product:

**Company Policy or** 

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