# SAFETY DATA SHEET
# CITRUS PLUS MASTIC REMOVER

Revision: 10/19/2015
Supersedes Revision: 03/06/2015

## 1. Product and Company Identification

**Product Code:** 00094

**Product Name:** CITRUS PLUS MASTIC REMOVER

**Company Name:** TWIN-CHEMICALS, INC.
6175 Hickory Flat Highway
Suite 110-344
Canton, GA 30755

**Phone Number:** (800)442-4958

**Web site address:** www.twinchemicals.com

**Email address:** sales@twinchemicals.com

**Emergency Contact:** CERTS (Health & Environment only) (800)552-3787

**Information:** Sales & Information - (800)442-4958

## 2. Hazards Identification

**Flammable Liquids, Category 3**
**Acute Toxicity: Skin, Category 4**
**Skin Corrosion/Irritation, Category 2**
**Aspiration Toxicity, Category 2**
**Acute Toxicity: Inhalation, Category 4**

**GHS Signal Word:** **Warning**

**GHS Hazard Phrases:**
H226 - Flammable liquid and vapor.
H305 - May be harmful if swallowed and enters airways.
H312 - Harmful in contact with skin.
H315 - Causes skin irritation.
H332 - Harmful if inhaled.

**GHS Precaution Phrases:**
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P240 - Ground/bond container and receiving equipment. P233 - Keep container tightly closed.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection.

**GHS Response Phrases:**
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P331 - Do NOT induce vomiting.
P332+313 - If skin irritation occurs, get medical advice/attention.
P362 - Take off contaminated clothing and wash before re-use.

**GHS Storage and Disposal Phrases:**
P403+235 - Store in cool/well-ventilated place.
P501 - Dispose of contents/container to a waste facility according to local regulations.
P405 - Store locked up.

**Potential Health Effects (Acute and Chronic):** Prolonged or repeated skin contact may cause defatting and dermatitis.

Chronic: May cause liver and kidney damage. Sophisticated modeling has clearly proven that 2-butoxyethanol does not build up in the body under any kinds of normal use.

**Inhalation:** Harmful if inhaled. May cause narcotic effects in high concentration. May cause lung damage. May cause central nervous system effects such as nausea and headache. Material is irritating to mucous membranes and upper respiratory tract.

**Skin Contact:** Causes skin irritation. Causes symptoms similar to those of inhalation. Skin sensitization testing with human volunteers produced negative results. A skin notation is not recommended by ACGIH, based on estimates from physiologically based pharmacokinetic models which indicate that, even in worst-case dermal-exposure scenarios, 2-butoxyethanol is not absorbed in amounts sufficient to cause red blood cell hemolysis in humans. May cause skin irritation.

**Eye Contact:** Causes redness and pain. Causes severe eye irritation.

**Ingestion:** Aspiration hazard. May cause irritation of the digestive tract. Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

## 3. Composition/Information on Ingredients

| CAS # | Hazardous Components (Chemical Name) | Concentration |
|---|---|---|
| 64742-47-8 | Hydrotreated light distillate (petroleum) | 80.0 -90.0 % |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB} | 10.0 -15.0 % |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate} | 3.0 -6.0 % |
| 5989-27-5 | (R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene} | < 5.0 % |

## 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 immediately. Remove from exposure and move to fresh air immediately.

**In Case of Skin Contact:** In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. 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 immediately.

**In Case of Ingestion:** Potential for aspiration if swallowed. Get medical aid immediately. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward. Call a poison control center. 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.

**Note to Physician:** None known.

## 5. Fire Fighting Measures

**Flash Pt:** 63.00 C Method Used: Cleveland Open Cup

**Explosive Limits:** LEL: 0.7 UEL: 7.0

**Autoignition Pt:** > 216.00 C

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate 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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Will burn if involved in a fire. Combustible liquid and vapor. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s):

**Flammable Properties and Hazards:**

**Hazardous Combustion Products:**

## 6. Accidental Release Measures

**Protective Precautions, Protective Equipment and Emergency Procedures:** Hand: Compatible chemical-resistant gloves. Always use a NIOSH or European Standard EN 149 approved respirator when necessary. Eye protection is recommended.

**Environmental Precautions:** Do not discharge directly into the environment or into the sewer system.

**Steps To Be Taken In Case Material Is Released Or Spilled:** Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation. Do not let this chemical enter the environment. 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:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep away from heat, sparks and flame. Do not ingest or inhale. User Exposure: Do not breathe vapor.

**Precautions To Be Taken in Storing:** Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## 8. Exposure Controls/Personal Protection

| CAS # | Partial Chemical Name | OSHA TWA | ACGIH TWA | Other Limits |
|---|---|---|---|---|
| 64742-47-8 | Hydrotreated light distillate (petroleum) | | TLV: 200 mg/m3 | |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB} | PEL: 50 ppm | TLV: 20 ppm | |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate} | | | |

5989-27-5 (R)-1-Methyl-4-(1-methylethenyl)-cycloh exene {(R)-(+)-Limonene}

**Respiratory Equipment (Specify Type):** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. 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.

**Eye Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Chemical safety goggles.

**Protective Gloves:** Wear appropriate protective gloves to prevent skin exposure.

**Other Protective Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**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. Use explosion-proof ventilation equipment. Use only under a chemical fume hood. Safety shower and eye bath.

**Work/Hygienic/Maintenance Practices:** Wash thoroughly after handling.

## 9. Physical and Chemical Properties

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

**Appearance and Odor:** Clear liquid.
solvent odor.

**pH:** NP

**Freezing Point:** < -70.00 C

**Boiling Point:** 199.00 C - 211.00 C

**Flash Pt:** 63.00 C Method Used: Cleveland Open Cup

**Evaporation Rate:** > 5 (BuAC=1)

**Flammability (solid, gas):**

**Explosive Limits:** LEL: 0.7 UEL: 7.0

**Vapor Pressure (vs. Air or mm Hg):** .05 MM_HG

**Vapor Density (vs. Air = 1):** NA

**Specific Gravity (Water = 1):** 0.800 - 0.820 at 20.0 C

**Density:** NP

**Solubility in Water:** Nil

**Saturated Vapor Concentration:** NA

**Octanol/Water Partition Coefficient:**

**Percent Volatile:** > 94.0 % by weight.

**Autoignition Pt:** > 216.00 C

**Decomposition Temperature:**

**Viscosity:** Water thin

## 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability:** ignition sources, Incompatible materials.

**Incompatibility - Materials To Avoid:** Strong acids. Strong bases, Oxidizing agents.

**Hazardous Decomposition or Byproducts:** Carbon monoxide, oxides of sulfur.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions:**

## 11. Toxicological Information

**Toxicological Information:** Epidemiology: No information found.
Teratogenicity: No information available. Reproductive Effects: Mutagenicity: Neurotoxicity:

**Carcinogenicity/Other Information:** CAS# 64742-47-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 111-76-2:
ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.
California: Not listed.
NTP: Not listed.
IARC: Not listed.

| CAS # | Hazardous Components (Chemical Name) | NTP | IARC | ACGIH | OSHA |
|---|---|---|---|---|---|
| 64742-47-8 | Hydrotreated light distillate (petroleum) | n.a. | n.a. | A4 | n.a. |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB} | n.a. | 3 | A3 | n.a. |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate} | n.a. | n.a. | n.a. | n.a. |
| 5989-27-5 | (R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene} | n.a. | 3 | n.a. | n.a. |

## 12. Ecological Information

**General Ecological Information:** Environmental: TERRESTRIAL FATE: Based on a recommended classification scheme, an estimated Koc value of 67,, determined from an experimental log Kow and a recommended regression-derived equation, indicates that ethylene glycol mono-n-butyl ether is expected to have high mobility in soil. An estimated BCF value of 2.5 was calculated for ethylene glycol mono-n-butyl ether, using an experimental log Kow of 0.83 and a recommended regression-derived equation. According to a recommended classification scheme, this BCF value suggests that bioconcentration in aquatic organisms is low.
Physical: No information found.
Other: An estimated BCF value of 2.5,, from an experimental log Kow, suggests that ethylene glycol mono-n-butyl ether bioconcentration in aquatic organisms will be low, according to a recommended classification scheme. 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

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Environmentally hazardous substance, liquid, n.o.s (applies to single containers of more than 119 gallons - smaller containers are not regulated)
NOT REGULATED FOR DOMESTIC TRANSPORT.

**DOT Hazard Class:**

**UN/NA Number:**

**LAND TRANSPORT (Canadian TDG):**

**TDG Shipping Name:** Environmentally hazardous substance, liquid, n.o.s (applies to single containers of more than 119 gallons - smaller containers are not regulated)

**AIR TRANSPORT (ICAO/IATA):**

**ICAO/IATA Shipping Name:** Non-Hazardous for Air Transport: Non-hazardous for air transport.

## 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) |
|---|---|---|---|---|
| 64742-47-8 | Hydrotreated light distillate (petroleum) | No | No | No |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB} | No | No | Yes-Cat. N230 |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate} | No | No | No |
| 5989-27-5 | (R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene} | No | No | No |

| CAS # | Hazardous Components (Chemical Name) | Other US EPA or State Lists |
|---|---|---|
| 64742-47-8 | Hydrotreated light distillate (petroleum) | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, Glycol Ether EB} | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No |
| 9016-45-9 | Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydr {Nonylphenol Ethoxylate} | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A PAIR; CA PROP.65: No |
| 5989-27-5 | (R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene} | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No |

## 16. Other Information

**Revision Date:** 10/19/2015

**Hazard Rating System:**

**HMIS:**

| | |
|---|---|
| HEALTH | 1 |
| FLAMMABILITY | 2 |
| REACTIVITY | |
| PPE | I |

**Additional Information About This Product:**

**Company Policy or Disclaimer:**

THE INFORMATION CONTAINED HEREIN is based upon available information at the time of preparation and isbelieved to be accurate but is not warranted to be so. Users are advised to confirm in advance of need that the information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or any other user proximately caused by the material if misused or if reasonable safety procedures are not adheared to as stipulated in the data sheet and on the prduct label. Furthermore, vendor assumes no responsibility for injury or damage caused by abnormal use of this material even if reasonable safety measures are followed.