

# Citrus Clean

Heavy Duty Cleaner

## DESCRIPTION

**Citrus Clean** is a heavy duty natural citrus distillate degreaser that is versatile to use and gives great performance. The biodegradable formulation is user-friendly and has a fresh citrus scent without any offensive fumes.

**Citrus Clean** can be used safely on hard surfaces and will remove rubber marks, print stains, heavy sludge, carbon deposits and grease. Also great for work bays, floors, metal parts and baked on soils.

## SPECIAL INFORMATION:

**Citrus Clean** contains d'limonene solvent. Ensure equipment is rinsed after use.

## DIRECTIONS

**Citrus Clean** may be sprayed by trigger sprayer or pressure wash. Mechanical agitation or brushing may be required for stubborn soils.

### **Dilution Ratios:**

#### **Heavy duty soiling:**

Use a 1:2 dilution of **Citrus Clean** (500 ml/litre) (64 oz/gallon). Do not use full strength on water based paints.

#### **Moderate to heavy soiling:**

Use a 1:5 dilution of **Citrus Clean** (200 ml/litre) (25 oz/gallon).

#### **Moderate soiling:**

Use a 1:20 dilution of **Citrus Clean** (50 ml/litre) (6.4 oz/gallon).

#### **Light soiling:**

Use a 1:64 dilution of **Citrus Clean** (16 ml/litre) (2 oz/gallon).

## PHYSICAL DATA

Appearance	Clear liquid
Color	Straw, amber
Foam	Moderate
Odor	Fresh orange
pH	11.0-12.5

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **CITRUS CLEAN**  
 Product Use: *Heavy duty citrus cleaner.*  
 M-chem Technologies Inc.  
 1607 Derwent Way  
 Delta, BC V3M 6K8, Canada  
 Phone: (604) 526-5655

WHMIS CODE: D2B, E  
 Proper Shipping Name: N/A  
 Hazard Class: N/A  
 UN Number: N/A

**EMERGENCY PHONE**  
 Canada: Canutec 613-996-6666  
 U.S.A.: Chemtrec 800-424-9300

HMIS	
3	Health
0	Flammability
0	Reactivity
B	Personal

A=Goggles, B=Goggles & Gloves  
 C=Goggles, Gloves and Apron

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, > =Greater Than

## SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO.	RANGE %	PEL	TLV	
<b>DIETHYLENE GLYCOL BUTYL ETHER</b>		112-34-5	1.0-5.0	N/A	N/A
LD50 (oral rat)	6560 mg/kg				
LD50 (dermal rabbit)	2700 mg/kg				
LC50	No Data				
<b>d'LIMONENE</b>		5989-27-5	1.0-5.0	N/A	N/E
LD50 (oral rat)	4400 mg/kg				
LD50 (dermal)	> 5000 mg/kg				
LC50	Not Available				
<b>ALKYLBENZENE SULPHONIC ACID</b>		25155-30-0	1.0-5.0	N/A	N/A
LD50	650 mg/kg (oral, rat)				
LD50	N/D (Dermal)				
LC50	N/D				

## SECTION 3 – PHYSICAL DATA

**Color and Odor:** Clear straw, citrus scent.      **Boiling Point:** Approx. 100°C      **Vapor Pressure (mm HG):** N/D      **pH:** 11.0 - 12.5  
**Physical State:** Liquid.      **Melting Point:** N/A      **Vapor Density:** N/D      **Specific Gravity:** 1.01 @ 20°C  
**Coef. Water/Oil Dist:** N/A      **Evaporation Rate:** N/D      **Solubility in Water:** Soluble      **Odor Threshold:** No Data

## SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

**Flash Point and Method:** >61°C, (140°F) (Flashpoint-Seta cc – ASTM D3828)      **Flammable Limits:** N/D  
**Sensitivity to Mechanical Impact:** None.      **Auto ignition Temperature:** N/D  
**Conditions of Flammability:** None known.  
**Sensitivity to Static Discharge:** None known.  
**Extinguishing Media:** Water, dry chemical or alcohol foam, carbon dioxide. Use extinguishing medias suitable for surrounding areas.  
**Unusual Fire and Explosion Hazards:** Prolonged contact with reactive metals (i.e. aluminum, tin, zinc, etc.) may form flammable and explosive hydrogen gas in confined areas.  
**Hazardous Combustion Products:** Decomposition may produce oxides of carbon.  
**Special Fire Fighting:** Wear full protective equipment, including a NIOSH/MSHA approved, self-contained breathing apparatus (SCBA) for large fires. For small fires, which may be easily extinguished by a portable fire extinguisher, the use of SCBA is optional. Use water spray to cool all nearby fire exposed surfaces.

## SECTION 5 – REACTIVITY DATA

**Chemical Stability:** Stable under normal storage conditions.      **Incompatibility (material to avoid):** Strong oxidizers, and acids.  
**Conditions to Avoid:** N/D      **Hazardous Polymerization:** Will not occur.  
**Hazardous Decomposition Products:** Decomposition may produce oxides of carbon.

## SECTION 6 – TOXICOLOGICAL DATA

**Exposure Limits:** See Section 2 under Hazardous Ingredient.      **Routes of Entry:** Skin and eye contact and inhalation.  
**Carcinogenicity:** None known.      **Teratogenicity:** None known.  
**Sensitization:** None known.      **Mutagenicity:** None known.  
**Reproductive Toxicity:** None known.      **Name of Toxicological Synergistic Product:** None known.  
**Irritancy of Product:** May be corrosive to skin, eyes and respiratory system.  
**Effects of Chronic Exposure:** Prolonged or repeated exposure may cause skin irritation, dryness or dermatitis.  
**Effects of Acute Exposure to Product:** Product exposure may cause skin and eye irritation. Prolonged skin contact may cause slight burns. Prolonged inhalation of vapors or mists may irritate respiratory tract causing headaches, nausea, central nervous system effects, etc. Ingestion may cause gastrointestinal discomfort and symptoms similar to inhalation.

## SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

**Respiratory Protection:** Normally not required. Use a NIOSH/MSHA approved dust/mist respirator if product is misted/sprayed in confined areas.  
**Ventilation:** Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.  
**Protective Gloves:** Recommended to minimize skin contact. Natural or butyl rubber, nitrile, or neoprene gloves.  
**Eye Protection:** If product is misted or sprayed, wearing of safety goggles or glasses is recommended.  
**Protective Clothing and Equipment:** Long sleeve clothing. Eyes wash recommended in the immediate work area.  
**Storage and Handling Procedures:** Use good industrial hygiene. Do not get in eyes. Avoid contact with skin, and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles and direct sunlight. Do not mix with any other chemicals. Store below 30°C. Keep from freezing.  
**Disposal Procedures for Spills or Leaks:** Wear protective equipment. Dike and contain large spills. Pump spill into a clean waste container. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and scoop into a clean waste container. Keep material away from sewers and natural waters.  
**Waste Disposal Method:** Reuse if possible. Otherwise dispose recovered material in accordance with all local, Provincial or Federal regulations.  
**Special Shipping Information:** Store at temperature below 30°C. Keep from freezing.

## SECTION 8 – EMERGENCY FIRST AID PROCEDURES

**First Aid:**  
 If swallowed, give plenty of clean water to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

## PREPARATION DATA