MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name **Citrus Blast Graffiti Remover**

CAS # Mixture

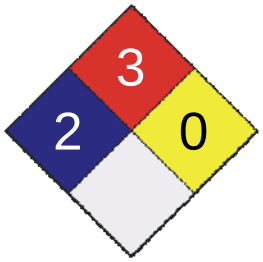
Product use Cleaner

Manufacturer Graffiti Solutions Canada
7785 Franktown Road
Richmond, ON K0A 2Z0 CA
Phone: 613-838-5842
Phone: 866-906-9273
Fax: 613-838-5843

CANUTEC 613-996-6666

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	*	2
Flammability		3
Physical Hazard		0
Personal Protection		X



2. Hazards Identification

Emergency overview
DANGER -- CORROSIVE
May cause sensitization by skin contact.
Flammable liquid - may release vapors that form flammable mixtures at or above the flash point. Containers may explode when heated.
Contains a potential mutagen.

Potential short term health effects

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Eyes Monoethanolamine is corrosive to the eyes.

Skin Monoethanolamine is corrosive to rabbit skin.
This product may be harmful if it is absorbed through the skin.
May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion Harmful if swallowed.
Acute oral exposure of monoethanolamine has caused necrosis of the gastric and intestinal mucosa.

Target organs Blood. Gastrointestinal tract. Eyes. Kidney. Liver. Respiratory system. Skin.
Based on published data, if contact is repeated and prolonged, monoethanolamine may cause liver and kidney damage. These effects have not been observed in humans.

Chronic effects This product may be harmful if it is absorbed through the skin.
Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Diacetone alcohol	123-42-2	30 - 60
Aryl alcohol	HMIRC#7216	15 - 40
D-Limonene	5989-27-5	10 - 30
Monoethanolamine	141-43-5	1 - 5

Composition comments	This product has been granted a trade secret exemption. The granted date associated with this trade secret exemption is February 27, 2009. All concentrations are expressed as %wt/wt.

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush the contaminated eye(s) with lukewarm gently flowing water for at least 30 minutes, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye (or face).
Skin contact	Under running water, remove contaminated clothing, shoes and leather goods. Continuously flush the contaminated area with lukewarm gently flowing water for at least 30 minutes.
Inhalation	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
Ingestion	Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Notes to physician	Symptoms may be delayed.
General advice	Keep away from sources of ignition. No smoking. Avoid contact with eyes and skin. Keep out of reach of children. Immediate medical attention is required. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties	Flammable by WHMIS/OSHA criteria. Vapors may travel to a source of ignition and flash back. Containers may explode when heated.
Extinguishing media	
Suitable extinguishing media	Carbon dioxide. Alcohol foam. Water spray. Dry chemical. Water Fog. Polymer foam.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Use water spray to reduce vapors or divert vapor cloud drift.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling	DANGER CORROSIVE TO EYES AND SKIN. FLAMMABLE May cause sensitization by skin contact. Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
Storage	Keep out of reach of children. Do not store at temperatures above 120°F (49°C). Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
Aryl alcohol	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Diacetone alcohol	**ACGIH-TLV** TWA: 50 ppm **OSHA-PEL** TWA: 50 ppm
D-Limonene	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Monoethanolamine	**ACGIH-TLV** TWA: 3 ppm STEL: 6 ppm **OSHA-PEL** TWA: 3 ppm

Aryl alcohol has an AIHA WEEL exposure limit of 10 ppm (8hr TWA).

Engineering controls	Provide adequate ventilation. General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Wear chemical goggles.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Yellow
Color	Yellow
Form	Liquid
Odor	Lemon.
Odor threshold	Not available
Physical state	Liquid
pH	10.1
Melting point	Not available
Freezing point	-77.80 °F (-61 °C)
Boiling point	147.20 °F (64 °C)
Pour point	Not available
Evaporation rate	Not available

Flash point	82.40 °F (28 °C) Tag Closed Cup
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	Not available
VOC (Weight %)	Not available
Viscosity	Not available
Percent volatile	Not available

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Avoid high temperatures. Reacts violently with acids. This product may react with oxidizing agents.
Incompatible materials	Acids. Oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects Monoethanolamine has a dermal LD50 (rabbit) of 1.0 mL/Kg (1018 mg/kg: specific gravity at 20°C = 1.018 g/mL)

Component analysis - LC50

Ingredient(s)	LC50
Aryl alcohol	8.8 mg/l/4h rat
Diacetone alcohol	Not available D-
Limonene	Not available
Monoethanolamine	1210 mg/m3 mouse

Component analysis - Oral LD50

Ingredient(s)	LD50
Aryl alcohol	1230 mg/kg rat
Diacetone alcohol	4000 mg/kg rat
D-Limonene	4400 mg/kg rat; 5600 mg/kg mouse
Monoethanolamine	1720 mg/kg rat; 700 mg/kg mouse

Effects of acute exposure

Eye	Monoethanolamine is corrosive to the eyes.
Skin	Monoethanolamine is corrosive to rabbit skin. This product may be harmful if it is absorbed through the skin. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	Harmful if swallowed. Acute oral exposure of monoethanolamine has caused necrosis of the gastric and intestinal mucosa.
Sensitization	Aryl alcohol has caused skin sensitization in workers and animals.
Chronic effects	This product may be harmful if it is absorbed through the skin. Based on published data, if contact is repeated and prolonged, monoethanolamine may cause liver and kidney damage. These effects have not been observed in humans.

Carcinogenicity Non-hazardous by WHMIS/OSHA criteria.

IARC - Group 3 (Not Classifiable)

D-Limonene	5989-27-5	Monograph 73 [1999] (overall evaluation downgraded from 2B to 3 with supporting evidence from other relevant data)

Mutagenicity Aryl alcohol has caused an increase in chromosomal aberrations in Chinese hamster ovary cells.
Diacetone alcohol has caused in vitro mutagenic effects in rat liver cells.

Reproductive effects Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Synergistic Materials Not available

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Aryl alcohol	Trade secret	3 Hr EC50 Anabaena variabilis: 35 mg/L
Monoethanolamine	141-43-5	72 Hr EC50 Desmodesmus subspicatus: 15 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Aryl alcohol	Trade secret	96 Hr LC50 Pimephales promelas: 460 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 10 mg/L [static]
Diacetone alcohol	123-42-2	96 Hr LC50 Lepomis macrochirus: 420 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 420 mg/L
D-Limonene	5989-27-5	96 Hr LC50 Pimephales promelas: 0.619-0.796 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 35 mg/L
Monoethanolamine	141-43-5	96 Hr LC50 Pimephales promelas: 227 mg/L [flow-through]; 96 Hr LC50 Brachydanio rerio: 3684 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 300-1000 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 114-196 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: >200 mg/L [flow-through]

Ecotoxicity - Water Flea - Acute Toxicity Data

Aryl alcohol	Trade secret	48 Hr EC50 water flea: 23 mg/L
Diacetone alcohol	123-42-2	24 Hr EC50 Daphnia magna: 8750 mg/L
Monoethanolamine	141-43-5	48 Hr EC50 Daphnia magna: 65 mg/L

Environmental effects Not available

Aquatic toxicity Not available

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Partition coefficient Not available

Mobility in environmental media Not available

Chemical fate information Not available

Other adverse effects Not available

13. Disposal Considerations

Waste codes Not available

Disposal instructions Dispose in accordance with all applicable regulations.

Waste from residues / unused products Not available

Contaminated packaging Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name	Flammable liquids, corrosive, n.o.s. (D-LIMONENE)
Hazard class	3 (8)
UN number	UN2924
Packing group	III
Additional information:	
Special provisions	B1, IB3, T7, TP1, TP28
Packaging exceptions	150
ERG number	132

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (D-LIMONENE)
Hazard class	3 (8)
UN number	UN2924
Packing group	III
Additional information:	
Special provisions	16

15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List

Aryl alcohol	Trade secret	1 %
Diacetone alcohol	123-42-2	1 %
D-Limonene	5989-27-5	1 %
Monoethanolamine	141-43-5	1 %

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Potassium hydroxide: 1000.0000
Sodium dodecylbenzene sulfonate: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

WHMIS status Controlled

WHMIS classification Class B - Division 2 - Flammable Liquid, Class D - Division 2B, Class E - Corrosive Material

WHMIS labeling

State regulations WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Diacetone alcohol	123-42-2	Present
Monoethanolamine	141-43-5	Present

U.S. - Illinois - Toxic Air Contaminants

Monoethanolamine	141-43-5	Present

U.S. - Massachusetts - Right To Know List

Aryl alcohol	Trade secret	Present
Diacetone alcohol	123-42-2	Present
Monoethanolamine	141-43-5	Present

U.S. - Minnesota - Hazardous Substance List

Aryl alcohol	Trade secret	Present
Diacetone alcohol	123-42-2	Present
Monoethanolamine	141-43-5	Present

U.S. - New Jersey - Right to Know Hazardous Substance List

Diacetone alcohol	123-42-2	sn 0606
Monoethanolamine	141-43-5	sn 0835

U.S. - Pennsylvania - RTK (Right to Know) List

Aryl alcohol	Trade secret	Present
Diacetone alcohol	123-42-2	Present
Monoethanolamine	141-43-5	Present

U.S. - Rhode Island - Hazardous Substance List

Diacetone alcohol	123-42-2	Toxic
Monoethanolamine	141-43-5	Toxic; Flammable

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer	Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.
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Other information	For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.