MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number	880-001
Product name	**Gel Vandal Mark Remover**
Effective date	24-Nov-2009
Company information	Claire Manufacturing Co. 500 Vista Ave. Addison, IL 60101 United States
Company phone	General Assistance 630-543-7600
Emergency telephone US	800-424-9300
Emergency telephone outside US	703-527-3887
Version #	04
Supersedes date	12-Mar-2008

2. Hazards Identification

Emergency overview

EXTREMELY FLAMMABLE. VAPOR HARMFUL.
CONTENTS UNDER PRESSURE. Aerosol. Will be easily ignited by heat, spark or flames. Irritating to skin. Irritating to eyes. Irritating to respiratory system. Prolonged exposure may cause chronic effects.

Potential health effects

Routes of exposure
Skin contact. Ingestion. Inhalation.

Eyes
Causes eye irritation.

Skin
This product may be harmful if it is absorbed through the skin. Irritating to skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation
Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion
Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs
Kidney.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been observed in humans.
Blood. Central nervous system. Liver. Lungs.

Chronic effects
Unconsciousness. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.

Signs and symptoms
Discomfort in the chest. Narcosis. Cyanosis. Liver enlargement. Jaundice. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Toluene	108-88-3	20 - 30
Propane	74-98-6	10 - 15
n-Butane	106-97-8	8 - 10
Acetone	67-64-1	5 - 8
2-Butoxyethanol	111-76-2	3 - 5
Diethylene Glycol Monobutyl Ether	112-34-5	3 - 5
9-Octadecenoic Acid	112-80-1	1 - 3
Non-hazardous and other components below reportable levels		20 - 40

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.
Skin contact	Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. Get medical attention if irritation develops or persists.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, get medical attention.
Ingestion	If material is ingested, immediately contact a poison control center. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. Fire Fighting Measures

Flammable properties	Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media	Water fog. Foam. Dry chemical. Carbon dioxide (CO2).

Protection of firefighters

Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Wear personal protective equipment. Avoid prolonged exposure.
Storage	Level 2 Aerosol. Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep in an area equipped with sprinklers. Keep out of the reach of children. Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Toluene	108-88-3	20 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
n-Butane	106-97-8	1000 ppm	Not established	Not established
Acetone	67-64-1	500 ppm	750 ppm	Not established
2-Butoxyethanol	111-76-2	20 ppm	Not established	Not established
Diethylene Glycol Monobutyl Ether	112-34-5	20 ppm	Not established	Not established

OSHA

Components	CAS #	TWA	STEL	Ceiling
Toluene	108-88-3	200 ppm	Not established	300 ppm
Propane	74-98-6	1000 ppm	Not established	Not established
Acetone	67-64-1	1000 ppm	Not established	Not established
2-Butoxyethanol	111-76-2	50 ppm	Not established	Not established
Diethylene Glycol Monobutyl Ether	112-34-5	100 ppm	Not established	Not established

Personal protective equipment

Eye / face protection Wear chemical goggles.

Skin protection Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.

Respiratory protection Wear positive pressure self-contained breathing apparatus (SCBA). If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance Compressed liquefied gas.

Boiling point 179.6 °F (82.2 °C) estimated

Color Tan.

Flammability (HOC) 20.727 kJ/g estimated

Flash back Yes

Flash point -156 °F (-104.4 °C) Propellant

Form Aerosol.

Odor Solvent.

pH 12.42 - 13.42

Physical state Liquid.

Pressure 60 - 75 psig @ 70F

Solubility Partially

Specific gravity 0.8229 estimated

10. Chemical Stability & Reactivity Information

Chemical stability Risk of ignition. Instability caused by elevated temperatures. May form explosive peroxides.

Conditions to avoid Heat, flames and sparks.

Hazardous decomposition products Irritants. Toxic gas. May include oxides of nitrogen.

11. Toxicological Information

Acute effects Acute LD50: 4005 mg/kg estimated, Rat, Dermal

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

2-Butoxyethanol	111-76-2	Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat 470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg
9-Octadecenoic Acid	112-80-1	Oral LD50 Rat 25 g/kg
Acetone	67-64-1	Oral LD50 Rat 5800 mg/kg
Diethylene Glycol Monobutyl Ether	112-34-5	Oral LD50 Rat 3384 mg/kg; Dermal LD50 Rabbit 2700 mg/kg
n-Butane	106-97-8	Inhalation LC50 Rat 658 mg/L 4 h
Propane	74-98-6	Inhalation LC50 Rat 658 mg/L 4 h
Toluene	108-88-3	Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Sensitization Not expected to be hazardous by OSHA criteria.

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity Components of this product are hazardous to aquatic life.

LC50 91.39 mg/L estimated, Fish, 96.00 Hours,
EC50 40.7 mg/L estimated, Daphnia, 48.00 Hours,
IC50 11587 mg/L estimated, Algae, 72.00 Hours,

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F
D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]
D018: Waste Benzene

Disposal instructions Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:

Proper shipping name	AEROSOLS
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5F
Labels required	None
Transport Category	2

IATA

Basic shipping requirements:	
Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	2.1

15. Regulatory Information

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

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

2-Butoxyethanol	111-76-2	1.0 % de minimis concentration (applies to R-(OCH2CH2)n-OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)
Diethylene Glycol Monobutyl Ether	112-34-5	1.0 % de minimis concentration (applies to R-(OCH2CH2)n-OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)
Toluene	108-88-3	1.0 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes

CERCLA (Superfund) reportable quantity

Toluene: 1000.0000
Acetone: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No
Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	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)

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

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

2-Butoxyethanol	111-76-2	Present
9-Octadecenoic Acid	112-80-1	Present
Acetone	67-64-1	Environmental hazard
Diethylene Glycol Monobutyl Ether	112-34-5	Environmental hazard
n-Butane	106-97-8	Present
Propane	74-98-6	Present
Toluene	108-88-3	Environmental hazard

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings	Health: 2* Flammability: 3 Physical hazard: 0
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
MSDS sections updated	This document has undergone significant changes and should be reviewed in its entirety.
Prepared by	Regulatory Compliance