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Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name **ERASE**

Product use Aerosol Vandal Mark Remover

Product code **0311**

Date of issue **05/31/11** **Supersedes 06/23/08**

Emergency Telephone Numbers

For MSDS Information:
Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency
CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

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Prepared By
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Section 2. Hazards Identification

Emergency overview

DANGER !

FLAMMABLE LIQUID AND VAPOR. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. VAPOR HARMFUL. HARMFUL IF ABSORBED THROUGH SKIN. CONTENTS UNDER PRESSURE.

Do not breathe vapor or mist. Contains material that may cause target organ damage, based on animal data. Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects **Routes of Entry** Dermal contact. Eye contact Inhalation.

Eyes Causes eye irritation. Inflammation of the eye is characterized by redness, watering and itching.

Skin Causes skin irritation. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering. Harmful if absorbed through the skin.

Inhalation Avoid inhalation of vapor, spray or mist. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Ingestion Aspiration hazard if swallowed. Can enter lungs and cause damage.

Chronic effects Repeated or prolonged exposure to the substance can produce damage to central nervous system, peripheral nervous system, brain, the reproductive system, kidneys, liver, mucous membranes and heart. May cause hearing impairment or change. Prolonged skin contact may cause dermatitis with drying and cracking of skin.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
TETRACHLOROETHYLENE; perchloroethylene; perc; carbon bichloride	127-18-4	30 - 60
TOLUENE; phenyl methane; methyl benzene; toluol	108-88-3	15 - 40
ETHANOL; ethyl alcohol; grain alcohol	64-17-5	7 - 13
METHYL ETHYL KETONE; 2-butanone; MEK; methyl acetone	78-93-3	5 - 10
CARBON DIOXIDE	124-38-9	1 - 5

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Skin Contact Wash affected area with soap or mild detergent and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point Not determined.

Flammable Limits Not determined.

Flammability Flammable aerosol (CSMA)

Auto-ignition Temperature

Fire-Fighting Procedures Use dry chemical or CO_2. Cool closed containers exposed to fire with water. Wear special protective clothing and positive pressure, self-contained breathing apparatus.

Fire hazard Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. May emit toxic fumes under fire conditions. Container explosion may occur under fire conditions or when heated.

Products of Combustion carbon oxides (CO, CO_2) Hydrogen chloride (HCl). Chlorine. and Phosgene gas.

Explosion hazard

Section 6. Accidental Release Measures

Spill Clean up Large spills are unlikely due to packaging.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Watch for accumulation in low confined areas. Wash thoroughly after handling.

Storage Store and use away from heat, sparks, open flame or any other ignition source. Keep away from heat, sparks and flame. Keep container in a cool, well-ventilated area. Do not store above the following temperature: 49°C (120.2°F). Do not puncture or incinerate container. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
Tetrachloroethylene	**ACGIH TLV (United States).** TWA: 25 ppm 8 hour(s). STEL: 100 ppm 15 minute(s). **OSHA PEL (United States).** TWA: 100 ppm 8 hour(s). CEIL: 200 ppm
Toluene	**ACGIH TLV (United States). Absorbed through skin.** TWA: 50 ppm 8 hour(s). **OSHA PEL Z2 (United States).** TWA: 200 ppm 8 hour(s).
Ethanol	**ACGIH TLV / OSHA PEL (United States).** TWA: 1000 ppm 8 hour(s).
Methyl Ethyl Ketone	**OSHA PEL (United States).** TWA: 200 ppm 8 hour(s). **ACGIH / OSHA (United States).** STEL: 300 ppm 15 minute(s).
Carbon Dioxide	**ACGIH TLV (United States).** TWA: 5000 ppm 8 hour(s). STEL: 30000 ppm 15 minute(s).

Personal Protective Equipment (PPE)

Eyes Safety glasses or Splash goggles.

Hands and Body Recommended: Chemical-resistant gloves. Viton

Respiratory Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and Chemical Properties

Physical State Liquid. (Aerosol.)
pH Not applicable.
Boiling Point Not available.
Specific Gravity 0.93
Solubility Insoluble in the following materials: cold water and hot water.
Freezing Point

Color Clear. Colorless.
Odor Solvent. [Strong]
Vapor Pressure 5.9 kPa (44 mm Hg)
Vapor Density Not available.
Evaporation Rate 1 (Carbon tetrachloride = 1)
VOC (Consumer) 45.0% 5.75 (lb/gal) 689 (g/l).

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.
Incompatibility Avoid contact with strong oxidizers, excessive heat, sparks or open flame.
Hazardous Polymerization Will not occur.
Hazardous Decomposition Products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure. Tetrachloroethylene: Classified Group 2A Probable for human. by IARC, Classified as possible human carcinogen by NTP.

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Tetrachloroethylene	LD50 Dermal	Rabbit	10000 mg/kg	-
	LD50 Oral	Rat	2629 mg/kg	-
Toluene	LC50 Inhalation Vapor	Mouse	5320 ppm	8 hours
	LD50 Oral	Rat	5000 mg/kg	-
Ethanol	LC50 Inhalation Vapor	Rat	20000 mg/m³	4 hours
	LD50 Oral	Rat	7 g/kg	-

Section 12. Ecological Information

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Tetrachloroethylene	-	Acute LC50 13 mg/L	Fish - Bluegill.	4 hours

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: D001
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	1950	Aerosols, flammable	2.1			Explosive Limit and Limited Quantity Index 1
IMDG Class	Not determined.					

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

WHMIS (Canada)

Class A: Compressed gas.
Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-1B: Material causing immediate and serious toxic effects (Toxic).

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.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.