

MATERIAL SAFETY DATA SHEET



1. Product Information

Product: tb Minuteman Hard Surface Disinfectant
Product Use: Intermediate level hard surface disinfectant solution
Supplier: maxill inc.
80 Elm Street, St. Thomas, Ontario
Canada N5R 6C8

Contacts: Head Office: (519) 631-7370 Fax: (519) 631-3388 Emergency 24 hour CANUTEC: (613) 996-6666

WHMIS Classification: Not applicable for drug products.

2. Preparation Information

Date Prepared: 28 June 2013 **Replaces:** 01 February 2011 **Revision:** 5
Prepared by: Operations Department
Glossary of Terms: NAV – Not Available NAP – Not Applicable DG – Dangerous Goods

3. Hazardous Ingredients

<u>Ingredient</u>	<u>CAS</u>	<u>% Range</u>	<u>LD50 Oral</u> mg/kg Species	<u>LD50 Dermal</u> mg/kg Species	<u>LC50 Inhalation</u> ppm/10 h Species
Ethanol	64-17-5	60 – 100	7060 Rat	20000 Rabbit	31623 Rat

4. Physical Data

Physical State: Liquid **Specific Gravity:** 0.8450 **Vapour Density:** Approx. 1.4 (air = 1)
Boiling Point: 78°C **Freezing Point:** < -80°C **Vapour Pressure:** Approx. 45 mm Hg
Appearance: Clear, colourless **Evaporation Rate:** > 1.8 (BuAc = 1) **pH:** 7.0 - 9.0
Odour: Ethanol, phenol **Odour Threshold:** Approx. 0.1 ppm **Coeff. of H₂O / Oil Distribution:** NAV

5. Fire and Explosion Data

WHMIS CLASS B? Yes **Flash Point:** ASTM D-92 → 20°C **Sensitivity to Static Charge:** Sensitive
Upper Explosion Limit: 19% v/v **Auto Ignition Temperature:** NAV **Sensitivity to Impact:** NAV
Lower Explosion Limit: 3.3% v/v
Extinguishment Media: Use dry chemical, foam or CO₂ for the fire. Use a water spray to keep the containers cool.
Conditions to Avoid: Avoid heat, sparks and open flame and temperatures above 30°C. Vapours formed from the product may travel or move by air currents and be ignited by pilot lights, sparks, electrical equipment or other ignition sources.
Hazardous Combustion Products: May emit toxic fumes of carbon monoxide and carbon dioxide, if exposed to fire. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.

6. Toxicological Properties

Route of Entry: Eyes, ingestion, inhalation and skin contact.

Effects of Acute Exposure:

Eyes: Causes severe irritation and damage to the eyes. May cause moderate conjunctivitis, seen as excess redness and swelling of the conjunctiva.

Skin: Brief contact will cause itching with mild to moderate local redness and possibly swelling. Contains materials that may be toxic and material may be absorbed through the skin leading to systemic effects similar to ingestion.

Inhalation: Mists, aerosols or vapours are irritation to the respiratory tract. High concentrations may cause nausea, headache and incoordination.

Ingestion: Due to the ethanol content and the amount consumed, ingestion may cause signs of intoxication characterized by incoordination, dizziness, drowsiness, headache, nausea, mental confusion and stupor and possible coma.

LD50 Oral(Ethanol): 7060 mg/kg (Rat)

LD50 Dermal (Ethanol): 20000 mg/kg (Rabbit)

Irritancy of Product: Eye and skin irritant. May be harmful if ingested.

Exposure Limit: ACGIH-TLV for ethanol is 1000 ppm, TLV – 1880 mg/m³ PEL – 1900 mg/m³ REL – 1900 mg / m³

Carcinogenicity: Not listed as a carcinogen.

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6. Toxicological Properties (continued)

Sensitization to Product: May cause skin sensitization in a small portion of individuals and present as an allergic contact dermatitis.

Teratogenicity: No

Reproductive Toxicity: NAV

Mutagenicity: No

Effects of Chronic Exposure: NAV

Synergistic Materials: Carbon tetrachloride, chloroform, bromotrichloromethane, dimethylnitrosamine, thioacetamide

7. First Aid Measures

Eye Contact: Rinse immediately with water, remove contact lenses if any, and continue rinsing with water for at least 15 minutes while holding eyelids open. Consult a physician immediately.

Ingestion: Do not induce vomiting. Give 2 glasses of water to drink and call a physician immediately. Do not give anything by mouth if person is unconscious or convulsing.

Inhalation: Remove to fresh air. If breathing is difficult, consult a physician.

Skin Contact: Remove contaminated clothing and shoes. Wash skin well with soap and water. Wash clothing before wearing again. If irritation develops, consult a physician.

8. Preventive Measures

Engineering Controls: General ventilation.

Handling Procedures: Avoid ingestion and eye or skin contact.

Storage Requirements: Store in original container in a dry place at controlled room temperature, away from incompatible materials such as alkaline materials, acids and oxidizing agents. Keep container closed when not in use.

Leak and Spill Procedure: Mop up excess spilled liquid. For small spills, collect with absorbent material such as paper, vermiculite or floor absorbent.

Waste disposal: Dispose of in accordance with applicable federal, provincial and municipal regulations.

Protective Equipment for Handlers of Open Packages and End-Users:

Respiratory: Not required under normal conditions of handling.

Eyes: Safety goggles.

Gloves: Impermeable gloves (rubber, Nitrile, butyl, neoprene) are recommended.

Other: None. Eye wash fountains are recommended.

9. Reactivity Data

Conditions of Instability: Stable

Incompatible Materials: Avoid contact with alkali metals, concentrated sulfuric or nitric acids, aldehydes, acyl chlorides, heat, sparks or other sources of ignition.

Conditions of Reactivity: High temperatures.

Hazardous Decomposition Products: May liberate toxic fumes of carbon oxides if exposed to fire.

10. Special Shipping Information

<u>DG</u>	<u>Proper Shipping Name</u>	<u>TDG Hazard Class</u>	<u>UN Number</u>	<u>Packing Group</u>
Yes*	FLAMMABLE LIQUID, N.O.S. (Ethanol)	3	1993	II

* Where the means of containment does not exceed 1 litre of product, a *Limited Quantity Exemption* applies.