MATERIAL SAFETY DATA SHEET
CAVICIDE

Current as of 4/12/2007

Effective Date: June 2001

PRODUCT INFORMATION

TRADE NAME:
CaviCide

PRODUCT USE:
Disinfectant Solution

MANUFACTURER: Metrex Research Corporation

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Orange, CA 92867
USA
Tel: (714) 516-7400
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EMERGENCY PHONE:
(USA) - Chemtrec: 1(800) 424-9300 (24 hours)
(Canada) - Canutec: 1(613) 996-6666 (24 hours)

MOLECULAR WEIGHT: Not applicable, mixture
DIN: 02161656
WHMIS CLASS: D2A, E

CHEMICAL NAME: Mixture
CHEMICAL FAMILY: Not applicable, mixture
CHEMICAL FORMULA: Not applicable, mixture

HAZARDOUS INGREDIENTS

	% BY WT.	CAS NO.	ACUTE LETHALITY
Isopropanol	10.0 to 20.0	67-63-0	LD_{50} (oral, rat) = 4710 mg/kg
Butyl Cellosolve	1.0 to 5.0	111-76-2	LD_{50} (oral, rat) = 790 mg/kg
Hyamine 1622	0.1 to 1.0	121-54-0	LD50 (oral, rat) = 420 mg/kg

PHYSICAL DATA

PHYSICAL STATE: liquid
BOILING POINT: 88 °C
MELTING POINT: -10 °C
VAPOUR PRESSURE
(mm Hg. @ 20 C): similar to water
VAPOUR DENSITY: same as water

SPECIFIC GRAVITY: 0.974
% VOLATILE BY VOLUME: not available
EVAPORATION RATE: not established
pH: 11.0 - 12.5

ODOUR THRESHOLD: not available

COEFFICIENT OF WATER/OIL DISTRIBUTION: not available
APPEARANCE AND ODOUR: clear to amber liquid with minty odour

FIRE OR EXPLOSION HAZARD

FLASH POINT: non-flammable
METHOD: not applicable

LOWER EXPLOSIVE LIMIT: not applicable
UPPER EXPLOSIVE LIMIT: not applicable

AUTO-IGNITION TEMPERATURE: not applicable
MEANS OF EXTINCTION: not applicable
SPECIAL FIRE FIGHTING PROCEDURES: not applicable

HAZARDOUS COMBUSTION PRODUCTS: oxides of nitrogen and carbon, low molecular weight volatile organic compounds.
EXPLOSION DATA: not applicable
SENSITIVITY to MECHANICAL IMPACT: none known
SENSITIVITY to STATIC DISCHARGE: none known

REACTIVITY DATA

STABILITY AT ROOM TEMPERATURE: This product is a stable solution within a closed container under normal conditions of storage and use.

INCOMPATIBLE MATERIALS: Oxidizing materials. Avoid contact with acids and alkalines.

CONDITIONS of REACTIVITY: Avoid temperatures above 50 °C; do not allow significant evaporation.

HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon

TOXICOLOGICAL PROPERTIES

OCCUPATIONAL EXPOSURE LIMITS:

	ACGIH TLV-TWA**	TWAEV*
isopropanol	400 ppm	400 ppm
butyl cellosolve	25 ppm	25 ppm
hyamine 1622	not established	not established

NOTE: * Time-weighted average exposure value limits as published in Ont. Reg. 833/90 (as amended by Ont. Reg. 513/92) REGULATION RESPECTING CONTROL OF EXPOSURE TO BIOLOGICAL OR CHEMICAL AGENTS.
** Threshold Limit Value of American Conference of Governmental Industrial Hygienists is concentration that can not be exceeded during an eight-hour exposure.

EFFECTS OF ACUTE EXPOSURE TO PRODUCT (Routes of entry):

INHALATION: Low to mild irritant. Inhalation of vapours at moderate concentrations may cause nose, throat and respiratory tract irritation, nausea and headaches. Inhalation of vapours at extremely high concentrations (above exposure guidelines) may result in CNS depression.

EYE CONTACT: Vapours are irritating to the eyes and may cause eye damage on contact.

SKIN CONTACT/ABSORPTION: Mild to moderate irritant.

INGESTION: Toxic. Ingestion of small amounts may cause irritation. Ingestion of large amounts may cause toxic effects similar to alcohol poisoning; including central nervous system depression, nausea and vomiting.
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: Repeated skin contact may cause dermatitis.

SENSITIZATION TO PRODUCT: No evidence of skin or respiratory sensitization.

CARCINOGENICITY: TERATOGENICITY: REPRODUCTIVE TOXICITY: No reported evidence of carcinogenicity or reproductive toxicity.

PREVENTIVE MEASURES

HANDLING PROCEDURES and EQUIPMENT: Avoid personal contact. Prevent skin and eye contact. Do not breathe fumes, vapours or spray mist released from this product. Do not use this product at elevated temperatures. Washing facilities should be readily available when using this product. Wash thoroughly after handling and before eating, drinking or smoking. Food should not be used in area where this product is stored or handled.

PERSONAL PROTECTIVE EQUIPMENT

EYES: Wear safety glasses or chemical safety goggles.

SKIN: Wear impervious material gloves, such as butyl rubber or nitrile.

RESPIRATORY: Depending on the airborne concentration, a NIOSH/MSHA approved respirator may be worn for concentrations up to 10 times the TLV.

ENGINEERING CONTROLS: General mechanical and local exhaust ventilation to maintain airborne concentrations below occupational exposure limits. If ventilation is insufficient, wear suitable respiratory protection.

STORAGE REQUIREMENTS: Keep containers tightly closed. Store in a cool, dry well ventilated area, away from acids, alkalines and oxidizers. Do not store with incompatible materials. Protect containers from damage.

SPILL or LEAK PROCEDURE: Stop discharge and contain spill. Keep others at a safe distance. Avoid all personal contact. Wear protective equipment listed above. Recover and reuse spilled material. Absorb remaining product with an inert absorbent. Dumping into sewer, onto the ground, or into any body of water may be prohibited by local sewer use by-laws. Wash residue from spill with water and flush to a sewer serviced by a wastewater treatment facility. Ventilate area to dispel residual vapour.

WASTE DISPOSAL: Wastes must be disposed of according to local, provincial or federal regulations.

FIRST AID

EYE: Immediately flush eyes with running water for a minimum of 20 minutes while forcing eyelids open during flush. Take care not to rinse contaminated water into the non-affected eye. Always seek medical attention for accidents involving the eyes.

SKIN: Wash affected areas with soap and running water for a minimum of 15 minutes while removing clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

INHALATION: Take proper precautions to ensure your own safety before attempting to

rescue. Remove source of contamination or move victim to fresh air. Give artificial respiration if not breathing, and get immediate medical attention.

INGESTION: DO NOT INDUCE VOMITING or give anything by mouth to an unconscious or convulsing person. If conscious, give 2 or 3 glasses of water. Aspiration of liquid into lungs during ingestion or vomiting may cause severe pulmonary injury or death. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. IMMEDIATELY contact local Poison Control Centre to obtain medical attention.

PREPARATION INFORMATION

PREPARED BY: GOODFELLOW CONSULTANTS INC. (905) 858-4424

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