Expect Service

Radiation Products Design Inc

SAFETY DATA SHEET

RPD INFORMATION

Address	5218 Barthel Industrial Drive Albertville, MN 55301
Website	www.rpdinc.com
Email	sales@rpdinc.com
Phone	763-497-2071 or 800-497-2071
Fax	763-497-2295

RAW MATERIAL INFORMATION

CaviWipes®

MATERIAL SAFETY DATA SHEET

1. Product And Company Identification

Product Name: **CaviWipes®**

Manufacturer: METREX® RESEARCH
28210 Wick Rd
Romulus, MI 48174
U.S.A.

Information Phone Number: 1-800-841-1428 (Customer Service)

Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

MSDS Date Of Preparation/Revision: 7/9/2012
Product Use: Hard surface cleaner and disinfectant wipe.
EPA Registration No: 46781-8

2. Hazards Identification

Clear liquid with an alcohol odor on a white towelette.

EMERGENCY OVERVIEW

Liquid saturant is a flammable liquid and vapor. Causes moderate eye irritation. May cause mild skin irritation. Harmful if absorbed through the skin. Inhalation of concentrated vapors may cause irritation of the eyes, nose and throat and dizziness and drowsiness. Prolonged overexposure to ethylene glycol monobutyl ether may affect liver, kidneys, blood, lymphatic system or central nervous system.

3. Composition/Information On Ingredients

The following composition refers to the liquid saturant

Component	CAS No.	Amount
Isopropanol	67-63-0	17.2%
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	111-76-2	1-5%
Diisobutylphenoxyethoxyethyldimethylbenzylammonium chloride	121-54-0	0.28%
Water	7732-18-5	70-80%

4. First Aid Measures

Inhalation: Move to fresh air if effects occur and seek medical attention if effects persist.

Skin Contact: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Ingestion: If liquid is swallowed, get medical advice by calling a Poison Control Center or hospital emergency room. If advice is not available, take victim and product container to the nearest emergency treatment center or hospital. Do not induce vomiting. Do not attempt to give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Extinguishing Media: Use water spray or fog, alcohol-resistant foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Special Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

Unusual Fire Hazards: Liquid saturant is a flammable liquid and vapor. Flammable vapors may collect in confined areas if large amounts are used.

Hazardous Combustion Products: Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides, amines, chlorine and hydrogen chloride.

6: Accidental Release Measures

Eliminate all ignition sources. Ventilate area. Use explosion-proof equipment if large amounts are released. Wear appropriate protective clothing and equipment (See Section 8). Collect spilled liquid material with an inert absorbent material and collect spilled wipes and place in appropriate, labeled container for disposal. Do not reuse towelette. Refer to Section 13 for disposal advice.

7. Handling and Storage

Avoid contact with eyes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Liquid saturant is a flammable liquid and vapor. Keep away from heat, sparks, open flames and all other sources of ignition. Keep containers closed when not in use. Do not reuse towelette.

Store in a cool, well ventilated area away from heat, oxidizers and all sources of ignition.

8. Exposure Controls / Personal Protection

Exposure Limits

Chemical	Exposure Limit
Isopropanol	200 ppm TWA, 400 ppm STEL ACGIH TLV 400 ppm TWA OSHA PEL
Ethylene Glycol Monobutyl Ether (2-Butoxyethanol)	20 ppm TWA ACGIH TLV 50 ppm skin TWA OSHA PEL
Diisobutylphenoxyethoxyethyldimethyl benzylammonium chloride	None Established

Ventilation: General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, mechanical ventilation such as local exhaust may be needed to minimize exposure.

Respiratory Protection: None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, a NIOSH/MSHA approved respirator with an organic vapor cartridges or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Gloves: Impervious gloves such as butyl rubber or nitrile are recommended for operations which may result in prolonged or repeated skin contact.

Eye Protection: None required for normal use. If liquid splashing is possible, wear splash proof goggles to prevent eye contact.

Other Protective Equipment/Clothing: None required for normal use. Wear protective clothing if needed to avoid prolonged/repeated skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.

9. Physical and Chemical Properties

Appearance And Odor: Clear liquid with an alcohol odor on a white towelette.
The following data applies to the liquid saturant.

Boiling Point:	Not Determined	Specific Gravity:	0.972
Solubility in Water:	Complete	pH:	11.0 -12.49
Vapor Pressure:	43.3 mmHg @ 20°C (isopropanol)	Vapor Density:	2.1 (isopropanol)
Percent Volatile:	>95%	Melting/Freezing Point:	Not Determined
Coefficient of Water/Oil Distribution:	Not Determined		
Flash Point:	28.3°C (83°F)	Flammable Limits:	LEL: 2% UEL: 12.7%

10. Stability and Reactivity

Stability: Stable
Conditions To Avoid: Heat, sparks, flames and all other sources of ignition.

Incompatibility: Strong oxidizing agents, acids and strong alkalis.
Hazardous Decomposition Products: Thermal decomposition will produce carbon monoxide, carbon dioxide, nitrogen oxides, amines, chlorine and hydrogen chloride.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

Potential Health Effects:
The following applies to the liquid saturant. The towelette is not hazardous.
Acute Hazards:
Inhalation: May cause irritation of the nose, throat and upper respiratory tract. High vapor concentrations may produce nausea, vomiting, headache, dizziness, drowsiness, weakness, fatigue, narcosis and possible unconsciousness. Not acutely toxic in rats.

Skin Contact: Prolonged or repeated exposure may cause mild irritation. No signs of toxicity or irritation were observed in a dermal toxicity study in rabbits. Non-irritating in a primary irritation study with rabbits. Negative in a skin sensitization study with guinea pigs.

Eye Contact: May cause irritation with tearing, redness and pain. Moderate irritant in an eye irritation study with rabbits. Effects reversed in 7 days.

Ingestion: Ingestion may cause gastrointestinal disturbances and central nervous system effects such as headache, dizziness, drowsiness and nausea. Not acutely toxic in rats.

Chronic Hazards: Prolonged overexposure to ethylene glycol monobutyl ether may affect liver, kidneys, blood, lymphatic system or central nervous system.

Medical Conditions Aggravated By Exposure: Due to its defatting properties, isopropyl alcohol may aggravate an existing skin condition.

Carcinogen: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

Acute Toxicity Values for CaviWipes:
LD50 Oral Rat >5000 mg/kg
LD50 Dermal Rabbit >2000 mg/kg
LC50 inhalation LC50 rat >2.08 mg/L

12. Ecological Information

This product is not classified as aquatically toxic based on the GHS criteria for aquatic toxicity.

Toxicity:

Isopropanol: LC50 fathead minnows 11,130 mg/L/48 hr; LC50 brown shrimp 1400 mg/L/48 hr Diisobutylphenoxyethoxyethyldimethylbenzylammonium chloride**:** LC50 pimephales promelas 1.6 mg/L/96 hr, LC50 lepomis macrochirus 1.4 mg/L/96 hr.

Persistence and degradability: Isopropanol and 2-butoxyethanol are readily biodegradable in screening tests. Diisobutylphenoxyethoxyethyldimethylbenzylammonium chloride is not readily

biodegradable.

Bioaccumulative Potential: Isopropanol has an estimated BCF of 3 suggesting that the potential for bioaccumulation is low.

Mobility in Soil: Isopropanol is expected to have very high mobility in soil.

13. Disposal Considerations

Do not contaminate water, food, or feed by storage and disposal.
Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. If recycling is not available, discard in trash.
Towelette Disposal: Do not reuse towelette. Dispose of used towelette in trash. Do not flush wipes down toilet.

14. Transport Information

U.S. DOT Hazard Classification
Proper Shipping Name: Not Regulated per alcohol exception (49CFR 173.150(e))
Technical Name: N/A
UN Number: N/A
Hazard Class/Packing Group: N/A
Labels Required: N/A

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG Code Shipping Classification
Proper Shipping Name: Alcohols, n.o.s. (Isopropanol)
UN Number: UN1987
Hazard Class: 3
Packing Group: III
Labels Required: Flammable Liquid (Class 3)
Placards Required: Class 3
Not classified as a marine pollutant

ICAO Air Transport Classification
Proper Shipping Name: Alcohols, n.o.s. (Isopropanol)
ID Number: UN1987
Hazard Class: 3
Packing Group: III
Labels Required: Class 3

15. Regulatory Information

EPA SARA 311/312 Hazard Classification: Fire Hazard, Acute Health, Chronic Health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol Monobutyl Ether (Glycol Ether)	1-5%

Protection Of Stratospheric Ozone: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA TSCA Inventory: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

16. Other Information

NFPA Rating: Fire: 3 Health: 2 Instability: 0

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, METREX® RESEARCH makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.