

Material Safety Data Sheet

PRODUCT CODE NUMBERS: MSC351200,
MSC351220, MSC351230, MSC351240, MSC351210,
MSC351250

SECTION 1

ISSUE DATE: June 9, 2006

IDENTITY: **MICRO-KILL+ GERMICIDAL WIPES**

MARKETED OR DISTRIBUTED BY:

Medline Industries, Inc.
One Medline Place
Mundelein, IL 60060
1.800.MEDLINE

Emergency Telephone Information:
Contact Your Regional Poison Control Center

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific chemical identity, common name(s))	CAS #	OSHA PEL	ACGIH TLV	Other limits Recommended	% (Optional)
ISOPROPYL ALCOHOL	67-63-0				<50%
2-BUTOXYETHANOL	111-76-2				<6%

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point: ND	SP Gravity (water=1): 0.9160 @ 25°C
Vapor pressure (mm Hg): ND	Melting Point: NA
Vapor density (air=1): ND	Evaporation Rate (butyl acetate=1):
Solubility in water: Complete Appearance and odor: Clear, colorless, alcohol odor	

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash point (method used): 74°F (TCC)		
Explosive limits:	LEL:	UEL:
Extinguishing media: Alcohol foam, Carbon dioxide, Dry chemical, Water spray, Water fog. Water may be ineffective but should be used to cool fire-exposed structures and vessels. DO NOT USE: Direct Water Stream.		
Special Fire Fighting Procedures: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapor and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. If container is not properly cooled it can rupture in the heat of a fire. Burning liquids may be extinguished by dilution with water. Do not use direct water stream, may spread fires. Move container from fire area if possible without hazard. Burning liquids may be moved by flushing water to protect personnel and minimize property damage. Run-off from fire may cause pollution.		
Unusual Fire and Explosive Hazards: FLAMMABLE LIQUID. Vapors are heavier than air. Vapors may settle in low or confined areas, or travel long distances along the ground or surface to an ignition source where they may ignite, flashback, or explode.		

SECTION 5 - REACTIVITY DATA

Stability: Stable under normal conditions

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Conditions to avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid sources of ignition. Avoid static discharge. Product can decompose at elevated temperatures.

Incompatibility (materials to avoid): Acids, Alkalies, Amines, Halogens or halogen compounds. Strong oxidizing agents, chlorine, isocyanates. Chlorinated compounds. Aldehydes, Alkanolamines, Ethylene oxide, Aluminum, Oleum, Chromium trioxide. Moisture, Acetaldehyde, Ketones, Acid anhydrides, Permanganates, Oxygen, Hydrogen peroxide, Potassium tert-butoxide. Iron salts. Carbonyl dichloride (phosgene). Trinitromethane. Barium perchlorate. Dioxygenyl tetrafluoroborate. Nitroform. Perchloric acid. Hypochlorous acid. Sulfuric acid. Urea formaldehyde. Hexamethylene

diisocyanate. May attack some forms of plastics, rubbers and coatings

Hazardous decomposition or byproducts. Decomposition products depend upon temperature, air supply and the presence of other materials. Carbon dioxide. Carbon monoxide. Irritating and/or toxic gasses. Aldehydes. Ketones. Organic acids.

Hazardous polymerization: Will not occur under normal conditions.

SECTION 6 - HEALTH HAZARD DATA

Potential Health Effects:

Eye Contact: Causes mild to severe irritation. Liquid contact may cause: burning sensation. Blurred vision. Inflammation. Swelling. Pain. Redness. Tearing. Corneal injury may occur. Vapors are also irritating.

Skin Contact: May cause mild to severe irritation. Contact may cause: redness. Pain. Stinging. Sensitization. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Repeated exposure may cause: burns. May cause more severe response on covered skin (under clothing, gloves).

Skin Absorption: May be harmful if absorbed through skin.

Inhalation: May cause moderate irritation. Vapors may irritate: nose. Throat. Respiratory tract. Inhalation overexposure may lead to central nervous system depression producing effects such as; headache. Dizziness. Incoordination. Confusion. Lightheadedness. Nausea. Drowsiness. Narcotic effects. Anesthetic effects. Unconsciousness. Coma. Extreme exposures may cause other central nervous system effects including death.

Ingestion: May cause moderate irritation. May cause: gastrointestinal disturbances. Nausea. Vomiting. Diarrhea. Cramps. Abdominal pain. Central nervous system depression. Excitement. Headache. Dizziness. Drowsiness. Excessive exposure may cause; facial flushing. Low blood pressure. Slow pulse. Kidney effects. Advanced stages may cause; collapse. Unconsciousness. Coma. Possible death due to respiratory failure. Liquid ingestion may result in vomiting; aspiration (breathing of liquid into the lungs) must be avoided as liquid contact with the lungs can result in chemical pneumonitis and pulmonary edema/hemorrhage. Aspiration can result in severe lung damage or death. (isopropyl alcohol's) lethal dose for humans is estimated at 250ml. Massive ingestion of ethylene glycol Monobutyl ether (attempted suicides) may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.

Medical conditions generally aggravated by exposure: Skin disorders. Lung disorders. Liver disorders. Kidney disorders.

Emergency and First Aid procedures:

Skin contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water. Do not apply oils or ointments unless ordered by the physician. Discard footwear which cannot be decontaminated.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed, call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head

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below hips to prevent aspiration of liquid into the lungs.

SECTION 7 - SPILL, LEAK, AND WASTE DISPOSAL PROCEDURES

Steps to be taken in case material is released or spilled. **FLAMMABLE LIQUID.** Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation.

Waste Disposal Method: Follow all local, state and federal regulations. Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: incinerator or other thermal destruction device. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Since emptied containers retain product residue, follow label warnings even after container is emptied. **DO NOT** pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

Precautions to be taken in handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust or liquid) and can be dangerous. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCE OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.** Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering. Always open containers slowly to allow any excess pressure to vent. Use nonsparking tools and equipment. Avoid splash filling.

Precautions to be taken in storing: **FLAMMABLE LIQUID.** Store in a cool, well ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment. Small quantities of peroxides can form on prolonged storage. Exposure to light and/or air significantly increases the rate of peroxide formation. If evaporated to a residue, the mixture of peroxides and Isopropanol may explode when exposed to heat or shock. After opening, purge container with nitrogen before re-closing. Periodically test for peroxide formation on long-term storage. Addition of water or appropriate reducing materials will lessen peroxide formation. Do not store or handle in aluminum equipment at temperatures above 120 deg F.

Other precautions: None indicated.

SECTION 8 - CONTROL MEASURES

Respiratory Protection (specify type) Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-approved organic respirator. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. **DO NOT** exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

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Ventilation: Local exhaust ventilation, process enclosures, or other engineering controls are required when handling or using this product to avoid overexposure. Use explosion-proof ventilation equipment. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly. Avoid creating dust or mist.

Protective gloves: Wear gloves and protective clothing depending on condition of use. Use gloves when handling HIV-1 or other bloodborne pathogen infected blood or body fluids.

Eye/Face Protection: Wear chemical safety goggles while handling this product. Do not wear contact lenses. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid or airborne material. Wear a full-face respirator, if needed.

Other protective clothing or equipment: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Butyl rubber.

Work/hygienic practices:

SECTION 9 -- ADDITIONAL INFORMATION

Safety and Hazard Ratings: (Minimal = 0; Slight = 1; Moderate = 2; Severe = 3; Extreme = 4)

Health (Acute-Chronic): 2 Flammability: 3 Reactivity: 0 Environment (Air-Water-Soil):

SECTION: 10 REGULATORY INFORMATION

DOT: CONSUMER COMMODITY ORM-D

Exception H sized packets are not regulated by DOT per small quantity exemption

SECTION 11 - ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet has been obtained from sources believed to be reliable. Medline Industries, Inc. provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein.

Document Revision History:

Issued:	June 9, 2006	New document
Revised:	December 14, 2007	Corrected product name
	April 30, 2012	Amended Section 8
	December 21, 2012	Added MSC351210 & MSC351250
		Amended Section 10 to include DOT information