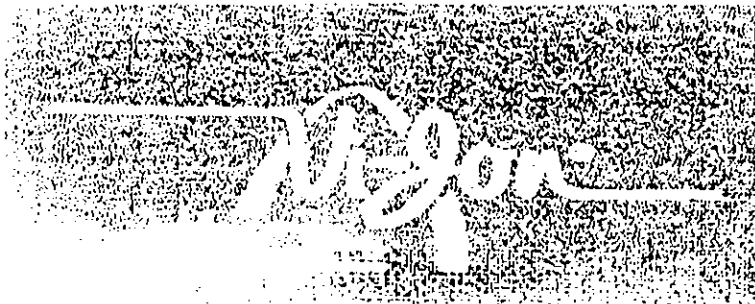


Material Safety Data Sheet



Vi-Jon Laboratories

8515 Page Avenue

St. Louis, MO 63114

314-427-1000

Section I: Chemical Identification

Product Name: Germ-X Hand Sanitizer

Product Code: PN 663

Date Prepared: June 16, 1997

Product Use: Hand Sanitizer

Manufacturer: Vi-Jon Laboratories, Inc.

FOR MORE INFORMATION CALL:

314-427-1000

IN CASE OF AN EMERGENCY:

314-965-6700

Section II: Hazardous Ingredients/Identity Information

<u>Hazardous Components</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>% content</u>
Ethyl Alcohol 64-17-5	TWA: 1000 ppm STEL: 1000 ppm	TWA: 1000 ppm STEL: 1000 ppm	63% w/v

NFPA Hazard Identification:

HEALTH = 1
FIRE = 3
REACTIVITY = 0

National Fire Protection Association(NFPA) Legend:

4=Extreme
3=Serious
2=Moderate
1=Slight
0=Minimal

Emergency Overview: Due to the ethyl alcohol content in Germ-X, this product is flammable in large quantities. Dangerous fire hazard when exposed to heat, sparks, flame, or oxidants. Eye and mucous membrane irritant. Harmful if swallowed or inhaled.

Additional information Section VI.

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Section III: Physical and Chemical Characteristics

Appearance: Clear viscous gel.
Physical State: Gel.
Color: Residual ether-like, citrus fragrance.
Boiling Point: @ 176EF (80EC)
Flash Point: 60EF (15.2EC)
Method: Tag closed cup.
Specific Gravity: 0.897 (H₂O=1)
Vapor Pressure @ 20EC: n/a
Vapor Density: n/a
Solubility in Water: Soluble.

Section IV: Fire and Explosion Hazard Data

Flash Point: 60EF (15.2EC)
Lower Flammable Limit: 3.3 (Volume % in air)
Upper Flammable Limit: 19.0 (Volume % in air)
OSHA Flammability Class: Flammable Liquid IB.

Extinguishing Media:

Small Fire: Use carbon dioxide or dry chemical
Large Fire: Use regular foam.

Note: Water spray will reduce the intensity of the flames.

Unusual Fire and Explosion Hazards:

Large quantities of Germ-X are flammable and vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants.

Special Firefighting Precautions/Instructions:

Handle as a flammable liquid. Use water to keep fire-exposed tanks and containers cool. Do not enter fire area without proper personal protective equipment to include a self-contained breathing apparatus.

Section V: Reactivity Data

Stability? Conditions to Avoid:

Stable. Keep away from heat, sparks and flame.

Incompatibility. Materials to Avoid:

Avoid strong oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization?

Hazardous polymerization will not occur.

Section VI: Health Hazard Data

Potential Health Hazards:

Skin: Prolonged exposure to vapor may irritate the skin. Repeated and prolonged contact of the gel with the

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Section VI cont

skin may cause dryness and erythema (inflammation) for those persons sensitive to ethyl alcohol.

Eyes: Can cause irritation of the eyes and mucous membranes.

Inhalation: Vapor concentration of 2,500-3,000 ppm causes minor irritation of the eyes, nose and throat. Inhalation of higher concentration may cause headache, nausea, confusion, drowsiness, convulsions, and coma.

Ingestion: Ingestion of a toxic dose can cause gastrointestinal irritation, narcosis and injury to the kidneys and liver.

Carcinogenicity?

NTP

IARC Status

OSHA

No ingredients listed in this section.

Medical Conditions Generally Aggravated by Exposure:

pre-existing eye, skin, and respiratory disorders, and asthma.

Section VII: First Aid Procedures

Skin: In case of skin contact remove contaminated clothing, immediately wash affected area with soap and water. Seek medical attention if contact causes skin to redden, crack; or dermatitis.

Eye: In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes, keeping eyelids wide open. Get prompt medical attention.

Inhalation: If inhaled remove patient to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen can be given by a qualified technician. Get prompt medical attention.

Ingestion: If swallowed, do not induce vomiting unless advised by a physician. Get prompt medical attention.

Section VIII: Precautions for Safe Handling and Use

In Case of Spill or Release:

Always wear the proper personal protective equipment. Eliminate all sources of ignition in the vicinity of the spill. Isolate the spill area and contain. Only trained personnel fitted with the proper personal protective equipment should be allowed to enter the spill site. Terminate the leak immediately, if possible. Collect the spill in a waste container for disposal. Flush the spill area thoroughly with water. Spill and washings must be contained and prevented from entering a waterway.

Waste Disposal Method:

Dispose according to federal, state, and local regulations.

Handling and Storage:

Do not store above 105°F (26°C). Keep away from sources of ignition and oxidizing materials. Always use in a well ventilated area.

Empty containers must be assumed to be hazardous due to residual product.

Other Precautions:

Keep Away From Children

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Section IX: Exposure Controls

Engineering Controls:

Good ventilation is essential in areas where this product is handled to prevent the accumulation of explosive mixtures. Explosion-proof fans and electrical should be used in ventilation systems.

Personal Protective Equipment:

Skin Protection: Natural rubber, Butyl, or neoprene gloves and apron. Chemical resistant safety shoes.

Eyes and Face: Chemical safety goggles.

Other Protective Clothing or Equipment:

Eye Wash, safety shower, protective suit. Fire blankets. Warning signs.

Respiratory Protection:

No respiratory protection is required for concentrations below 1000 ppm.

1000 ppm-3500 ppm-NIOSH approved chemical cartridge respirator with an organic vapor cartridge.

3500 ppm and above-NIOSH approved supplied-air respirator.

Escape or entry into unknown permit required confined space-NIOSH approved self contained breathing apparatus with full face-piece..

Work/Hygienic Practices:

Following generally recognized safety practices and sound work methods should be used when handling this product in large or small quantities.

Notice

The information and recommendations contained in the Material Safety Data Sheet (MSDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein (hereinafter \equiv information) are presented in good faith and believed to be correct as of this date hereof.

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