

**Smart-San Healthcare Personnel Handwash
MATERIAL SAFETY DATA SHEET**

1. PRODUCT IDENTIFICATION: Smart-San Healthcare Personnel Handwash

Synonym: Hand Sanitizer

Chemical Family: Ethanol-quaternary-glycerol-water blend

Manufactured By: BEST SANITIZERS, Inc.

P.O. Box 1360, 17320 Penn Valley Drive
Penn Valley, Ca 95946

Emergency Information: CHEMTREC toll-free, 24-hour emergency telephone number,
800-424-9300 or Best Sanitizers 1 (888) 225-3267, 8-5 Pacific Standard Time

Other Information: US patent No. 4,870,108,

Precautions: Flammable. Keep away from high heat, sparks, flame and all other ignition sources. May be harmful or fatal if swallowed. Use with adequate ventilation. Avoid prolonged breathing of vapor. Avoid contact with eyes or mucous membranes where prolonged contact causes irritation.

Date Revised: 14 March 2008

2. HAZARDOUS INGREDIENTS

Chemical Names	CAS Numbers	Percent*	ACGIH TLV	Exposure Limits In Air (ppm)	
				OSHA PEL	Other (specify)
Ethanol (SDA 23A)	64-17-5	70-80	1500	1500	
Benzalkonium-Cl	8001-54-1	0.08-0.12			
Other non-hazardous ingredients		20-30			
TOTAL		100.00			

*Not a required category

3. PHYSICAL PROPERTIES

Vapor Density:	NA	Physical State:	Clear liquid
Vapor Pressure:	NA	Color:	Clear
Specific Gravity:	0.87	Odor:	Alcohol odor
Melting Point:	NA	Miscibility:	100% in water
Boiling Point:	83C	Stability:	>5 years
Viscosity:	non-viscous	Corrosion:	non-corrosive

Does not stain skin, fabrics, plastics, metals, glass, formica.

How To Detect This Substance: Mild alcoholic odor

4. FIRE AND EXPLOSION

Flash point: 56.3 F Closed Cup

Auto-ignition temperature: >685 F

Flammable limits in air, volume %: lower 5.5; upper 15.

NFPA Rating: Health (0), Flammability (3), Physical Hazard/ Instability (1)

FIRE FIGHTING PROCEDURES: Use dry chemical, "alcohol foam", or carbon dioxide. Water may be ineffective, but water should be used to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect persons attempting to stop a leak.

Water may be used to flush and dilute spills to nonflammable mixtures.

5. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE for each potential route of exposure:

INHALATION: Exposure to over 1500 ppm Ethanol may cause headache, drowsiness, lassitude loss of appetite and inability to concentrate. May cause irritation of the throat.

SWALLOWED: Can cause depression of central nervous system, nausea, vomiting, diarrhea.

EYE CONTACT: Can cause eye irritation (stinging sensation) and tear production. Redness of conjunctiva may occur.

SKIN CONTACT: Causes no skin irritation if used as directed. Glycerol content prevents defatting of skin.

Excessive, continuous exposure for a long period of time may cause defatting or drying of skin. Rate of absorption of active ingredients through skin or the effects thereof are unknown.

INGESTION: Can cause depression of central nervous system, nausea, vomiting, and diarrhea.

HEALTH EFFECTS FROM EXPOSURE

ACUTE/CHRONIC: No special acute or chronic effects or risks are expected from usage as directed on label. Brief, repeated daily use as a skin antiseptic is not harmful and may be beneficial in aiding the healing of skin damaged by excessive, daily handwashing with soaps and detergents as well as skin affected by bacterial, viral or fungal infections. Brief contact with eyes, conjunctiva or other mucous membranes may cause temporary irritation. Ingestion will cause irritation of throat and esophagus and may cause mental or physical disabilities associated with alcohol intoxication.

FIRST AID, EMERGENCY PROCEDURES

EYE CONTACT: Immediately flush affected area with plenty of cool water for at least 15 minutes. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION: Immediately remove victim to fresh air. If victim has stopped breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If victim is conscious and able to swallow, have victim drink water or milk to dilute. Never give victim anything by mouth if victim is unconscious or having convulsions. CALL PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. Induce vomiting only if advised by physician or poison control center. SUSPECTED CANCER AGENT?

No. This product's ingredients are not found in Federal OSHA, NTP or IARC lists.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None known when used as directed.

6. REACTIVITY DATA

STABILITY: Stable at room temperature for at least 5 years in a tightly closed container.

CONDITIONS AND MATERIALS TO AVOID: Contact with acetyl chloride and a wide range of strong oxidizing agents which may react violently.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide can form upon incomplete combustion.

HAZARDOUS POLYMERIZATION: None likely.

7. SPILL, LEAK AND DISPOSAL PROCEDURES

ENVIRONMENTAL PRECAUTIONS: Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

SPILL OR LEAK PROCEDURES: In case of large spills, wear appropriate respiratory protection. Eliminate possible ignition sources. Contain spilled material. Transfer to secure containers. Where necessary, collect spilled product using absorbent media. Dilute spill with water and directly flow to any available sanitary drain. In the event of an uncontrolled release of this product, the user should determine if the release is reportable under applicable laws and regulations.

WASTE DISPOSAL: All recovered product may be dispensed along with water through normal sanitary sewage systems in gradual releases.

Note: Dispose of all wastes in accordance with federal, state and local regulations.

8. SPECIAL HANDLING INFORMATION

VENTILATION: Adequate ventilation should be available for all uses of this product.

RESPIRATORY PROTECTION: Where exposure is likely to exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. For normal use of product as a skin antiseptic no respirators are deemed necessary.

EYE PROTECTION: Contact of product with the eyes is expected or anticipated in the normal use: however, if there is a possibility of splashing or other means of contact with eyes, chemical safety goggles meeting the specifications of ANSI Standard Z87. 1 should be worn.

GLOVES OR OTHER PROTECTIVE CLOTHING: No protective gloves or clothing are deemed necessary for normal application of product as a skin antiseptic.

STORAGE: Store product in cool place away from areas of high heat, flames or potential sparks. Empty containers may be discarded in trash after rinsing with water.

SHIPPING DESCRIPTION: UN1170 Ethanol, 3, PG II for containers above one liter.

For bottles one liter or less ORMD