SAFETY DATA SHEET

Issue Date 03-Feb-2015

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Version 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier Product Name

E-3 Foaming Hand Sanitizer

Other means of identification 281

28130107

Details of the supplier of the safety data sheet Bortek Industries Inc 4713 Gettysburg Rd Mechanicsburg 17055

Emergency telephone number Emergency Telephone

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Flammable liquids	Category 2

Label elements

Emergency Overview

Hazard statements

Harmful to aquatic life with long lasting effects Highly flammable liquid and vapor



Appearance Clear

Physical state Liquid

Odor Alcohol

Precautionary Statements - Prevention Avoid release to the environment

Precautionary Statements - Response Specific Treatment (See Section 4 on the SDS)

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information Unknown Acute Toxicity

71.65% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Ethanol	64-17-5	60-90	*
2-Propanol	67-63-0	1-5	*
Chlorhexidine Gluconate	18472-51-0	1-5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES					
First aid measures					
General advice	eneral advice Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).				
Skin Contact	Wash off immediately with plenty of water.				
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.				
Inhalation	Remove to fresh air.				
Ingestion	Clean mouth with water and drink afterwards plenty of water.				
Self-protection of the first aider	er Remove all sources of ignition.				
Most important symptoms and effects, both acute and delayed					
Symptoms	Any additional important symptoms and effects are described in Section 11: Toxicology Information.				
Indication of any immediate medical attention and special treatment needed					
Note to physicians	Treat symptomatically.				
5. FIRE-FIGHTING MEASURES					

<u>Suitable extinguishing media</u> Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

<u>Protective equipment and precautions for firefighters</u> As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES			
Personal precautions, protective equipment and emergency procedures			
Personal precautions	sonal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.		
Environmental precautions			
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.		
Methods and material for containm	ent and cleaning up		
Methods for containment	lethods for containment Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.		
7. HANDLING AND STORAGE			
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Precautions for safe handling	7. HANDLING AND STORAGE		
<u>Precautions for safe handling</u> Advice on safe handling	7. HANDLING AND STORAGE Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.		
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Advice on safe handling	Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.		

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines	idelines Exposure guidelines noted for ingredient(s).			
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Ethanol	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm	
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm	
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³	
		(vacated) TWA: 1900 mg/m ³	6	
2-Propanol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm	
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm	
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³	
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm	
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³	
		(vacated) STEL: 1225 mg/m ³	6	

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir. 1992).

Method

Appropriate engineering controls

Engineering Controls	Showers, Eyewash stations & Ventilation systems.	
Individual protection measures, su	ch as personal protective equipment	
Eye/face protection	No special technical protective measures are necessary.	
Skin and body protection	No special technical protective measures are necessary.	
Respiratory protection	No protective equipment is needed under normal use conditions.	
General Hygiene	Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Clear
Odor	Alcohol
Odor threshold	No Information available

Property_	Values	Remarks
рН	6.5 - 7.5	
Specific Gravity	.85	
Viscosity	10 cP @ 25°C	
Melting point/freezing point	No Information available	
Flash point	21 °C 70 °F	
Boiling point / boiling range	No Information available	
Evaporation rate	No Information available	
Flammability (solid, gas)		
Flammability Limits in Air		
Upper flammability limit:	Not Applicable	
Lower flammability limit:	Not Applicable	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	
Other Information		

7.09

74.5

Density Lbs/Gal VOC Content (%)

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Avoid breathing vapors or mists.	
Eye contact	No data available. Avoid contact with eyes.	
Skin Contact	No known hazard in contact with skin.	
Ingestion	No data available. Do not taste or swallow.	

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol	= 7060 mg/kg (Rat)	Yes	= 124.7 mg/L (Rat) 4 h
64-17-5	· ·		
2-Propanol	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
67-63-0			- · · ·

Information on toxicological effects

Symptoms

No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Germ cell mutagenicity Carcinogenicity	on available. ow indicates whether each been shown to be carcinog	
a	erage:	

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Propanol	Yes	Group 3	Yes	Х
67-63-0				

 ACGIH (American Conference of Governmental Industrial Hygienists)

 A3 - Animal Carcinogen

 IARC (International Agency for Research on Cancer)

 Not classifiable as a human carcinogen

 Group 1 - Carcinogenic to Humans

 NTP (National Toxicology Program)

 Known - Known Carcinogen

 OSHA (Occupational Safety and Health Administration of the US Department of Labor)

 X - Present

 Reproductive toxicity
 No Information available.

 STOT - single exposure
 No Information available.

 STOT - repeated exposure
 No Information available.

Chronic toxicity	Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.
Target organ effects	EYES, Respiratory system, Skin, Blood, Central nervous system, Liver, Reproductive System.
Aspiration hazard	No Information available.
Numerical measures of toxicity	- Product Information
Unknown Acute Toxicity	71.65% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

72.65% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethanol	Yes	12.0 - 16.0: 96 h Oncorhynchus	9268 - 14221: 48 h Daphnia magna
64-17-5		mykiss mL/L LC50 static 100: 96 h	mg/L LC50 2: 48 h Daphnia magna
		Pimephales promelas mg/L LC50	mg/L EC50 Static 10800: 24 h
		static 13400 - 15100: 96 h	Daphnia magna mg/L EC50
		Pimephales promelas mg/L LC50	
		flow-through	
2-Propanol	1000: 96 h Desmodesmus	9640: 96 h Pimephales promelas	13299: 48 h Daphnia magna mg/L
67-63-0	subspicatus mg/L EC50 1000: 72 h	mg/L LC50 flow-through 11130: 96	EC50
	Desmodesmus subspicatus mg/L	h Pimephales promelas mg/L LC50	
	EC50	static 1400000: 96 h Lepomis	
		macrochirus µg/L LC50	
2-Phenoxyethanol	500: 72 h Desmodesmus	337 - 352: 96 h Pimephales	500: 48 h Daphnia magna mg/L
122-99-6	subspicatus mg/L EC50	promelas mg/L LC50 flow-through	EC50
		366: 96 h Pimephales promelas	
		mg/L LC50 static 220 - 460: 96 h	
		Leuciscus idus mg/L LC50 static	
Benzalkonium Chloride	Yes	0.223 - 0.46: 96 h Lepomis	Yes
8001-54-5		macrochirus mg/L LC50 static 1.3:	
		96 h Poecilia reticulata mg/L LC50	
		semi-static 0.823 - 1.61: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		static 2.4: 96 h Oryzias latipes mg/L	
		LC50 semi-static	

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Chemical Name	Partition coefficient
2-Propanol	0.05
67-63-0	

Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

	California Hazardous Waste Status
2-Propanol	Toxic
67-63-0	Ignitable

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT	
UN/ID No.	UN1170
Proper shipping name	Ethanol solutions
Hazard Class	3
Packing Group	II

	15. REGULATORY INFORMATION
International Inventories TSCA DSL/NDSL	Complies Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %	
2-Propanol - 67-63-0	1.0	
SARA 311/312 Hazard Categories		
Acute health hazard	No	
Chronic Health Hazard	No	
Fire hazard	No	
Sudden release of pressure hazard	No	
Reactive Hazard	No	

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65	

Ethanol - 64-17-5	Carcinogen
	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	Х	Х	Х
2-Propanol 67-63-0	Х	Х	Х
2-Phenoxyethanol 122-99-6	Х	Yes	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION Physical and Chemical Instability 0 NFPA Health hazards 2 Flammability 3 Properties Yes HMIS Health hazards 2 Flammability 3 Physical hazards 0 Personal protection A **Issue Date** 03-Feb-2015 **Revision Date** 03-Feb-2015 **Revision Note** No Information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet