Revision: April 07, 2020

I Identificati		
· Product ide	entifier	
 Trade name: Product cod 	: APS Hand Sanitizer le: S27937	
Recommend	ded use and restriction on use ded use: Laboratory chemicals a on use: No relevant information available.	
• Manufacture AquaPhoenix 860 Gitts Rur Hanover, PA Tel +1 (717)6 Toll-Free: (86	x Scientific, Inc. n Road 17331 USA 532-1291 56)632-1291 noenixsci.com ce Education Crest Road, 2A 18064	
	telephone number:	
+1 (813)248-	24 (North America) -0585 (International)	
(800)255-392 +1 (813)248-	24 (North America)	
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati	24 (North America) -0585 (International) identification ion of the substance or mixture	
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati	24 (North America) -0585 (International) identification	
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3	24 (North America) -0585 (International) identification ion of the substance or mixture	
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3 Eye Irrit. 2A • Label eleme • GHS label el The product i	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS)	
(800)255-392 +1 (813)248- 2 Hazard(s) * Classificati Flam. Liq. 3 Eye Irrit. 2A * Label eleme * GHS label el	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS) ograms:).
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3 Eye Irrit. 2A • Label eleme • GHS label eleme • GHS label eleme • Hazard picto • GHS02 GHS0 • Signal word: • Hazard state H226 Flamma H319 Causes • Precautional	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS) ograms: 07 : Warning ements: able liquid and vapor. s serious eye irritation. ry statements:).
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3 Eye Irrit. 2A • Label eleme • GHS label eleme • GHS label eleme • Hazard picto • GHS02 GHS0 • Signal word: • Hazard state H226 Flamma H319 Causes • Precautional P210	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS) ograms: 07 : Warning ements: able liquid and vapor. s serious eye irritation. ry statements: Keep away from heat/sparks/open flames/hot surfaces No smoking.).
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3 Eye Irrit. 2A • Label eleme • GHS label eleme • GHS label eleme • Hazard picto • GHS 02 GHS0 • Signal word: • Hazard state H226 Flamma H319 Causes • Precautional P210 P233	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS) ograms: 07 : Warning ements: able liquid and vapor. s serious eye irritation. ry statements: Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed.).
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3 Eye Irrit. 2A • Label eleme • GHS label eleme • GHS label eleme • Hazard picto • GHS 02 GHS0 • Signal word: • Hazard state H226 Flamma H319 Causes • Precautional P210 P233 P242	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS) ograms: 07 : Warning ements: able liquid and vapor. s serious eye irritation. ry statements: Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Use only non-sparking tools.).
(800)255-392 +1 (813)248- 2 Hazard(s) • Classificati Flam. Liq. 3 Eye Irrit. 2A • Label eleme • GHS label eleme • GHS label eleme • Hazard picto • GHS 02 GHS0 • Signal word: • Hazard state H226 Flamma H319 Causes • Precautional P210 P233	24 (North America) -0585 (International) identification ion of the substance or mixture H226 Flammable liquid and vapor. H319 Causes serious eye irritation. ents lements is classified and labeled according to the Globally Harmonized System (GHS) ograms: 07 : Warning ements: able liquid and vapor. s serious eye irritation. ry statements: Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed.).

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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P305+P351+P3	38 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: Alcohol resistant foam or water spray.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

• Other hazards There are no other hazards not otherwise classified that have been identified.

3 Compo	osition/information on ingredients		
· Chemic	al characterization: Mixtures		
· Compo	nents:		
64-17-5	Ethanol	 Flam. Liq. 2, H225 Eye Irrit. 2A, H319 	60-70%
56-81-5	Glycerol		3-7%
· Additio	nal information: For the wording of the listed Hazard Stateme	ents, refer to section 16.	

4 First-aid measures

[•] Description of first aid measures

· General information: Immediately remove any clothing soiled by the product.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Product is manufactured for topical use. If irritation occurs, discontinue use and wash affected area with soap and water.

If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

- Most important symptoms and effects, both acute and delayed: Causes serious eye irritation.
- · Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

• Extinguishing media

• Suitable extinguishing agents:

Alcohol resistant foam

Water fog / haze

Carbon dioxide

Gaseous extinguishing agents Fire-extinguishing powder

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(Cont'd. of page 2)

• For safety reasons unsuitable extinguishing agents: No relevant information available. • Special hazards arising from the substance or mixture Flammable liquid and vapor.

· Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

• Additional information: Use large quantities of foam as it is partially destroyed by the product.

6 Accidental release measures

[•] Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Remove ignition sources.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

[·] Handling

Precautions for safe handling:

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

[•] Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

· Information about storage in one common storage facility:

Store away from oxidizers, strong acids, strong bases. Store away from foodstuffs.

• Further information about storage conditions: Keep containers tightly sealed.

• Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

(Cont'd. on page 4)

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		(Cont'd. of pa
Control paran	neters	
	rith limit values that require monitoring at the workplace:	
64-17-5 Ethano	l	
PEL (USA)	Long-term value: 1900 mg/m³, 1000 ppm	
REL (USA)	Long-term value: 1900 mg/m³, 1000 ppm	
TLV (USA)	Short-term value: 1880 mg/m³, 1000 ppm	
EL (Canada)	Short-term value: 1000 ppm	
EV (Canada)	Long-term value: 1,900 mg/m³, 1,000 ppm	
LMPE (Mexico)	Long-term value: 1000 ppm A3	
56-81-5 Glycer	bl	
PEL (USA)	Long-term value: 15* 5** mg/m³ mist; *total dust **respirable fraction	
TLV (USA)	TLV withdrawn-insufficient data human occup. exp.	
EL (Canada)	Long-term value: 10* 3** mg/m ³ *mist, total; **mist, respirable	
EV (Canada)	Long-term value: 10 mg/m³	
LMPE (Mexico)	Long-term value: 10 mg/m³	
The usual preca Keep away from Immediately ren	tive and hygienic measures: nutionary measures for handling chemicals should be followed. n foodstuffs, beverages and feed. nove all soiled and contaminated clothing. fore breaks and at the end of work.	
Engineering co Breathing equi Protection of h	ontrols: Provide adequate ventilation. pment: For large spills, respiratory protection may be advisable. ands: Gloves are advised for repeated or prolonged contact.	
Engineering co Breathing equi	pment: For large spills, respiratory protection may be advisable. ands: Gloves are advised for repeated or prolonged contact. :	
Engineering co Breathing equi Protection of h Eye protection Safety g Follow relevant Body protection Limitation and No relevant info	pment: For large spills, respiratory protection may be advisable. ands: Gloves are advised for repeated or prolonged contact. :	
Engineering co Breathing equi Protection of h Eye protection Safety g Follow relevant Body protection Limitation and No relevant info	pment: For large spills, respiratory protection may be advisable. ands: Gloves are advised for repeated or prolonged contact. glasses national guidelines concerning the use of protective eyewear. n: Protective work clothing d supervision of exposure into the environment rmation available.	

Appearance: Form: Color:

Liquid Clear

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	(Cont'd. of page 4
Odor:	Alcohol-like
Odor threshold:	Not determined.
pH-value:	7-8
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	82.2 °C (180 °F)
Flash point:	23 °C (73.4 °F)
Flammability (solid, gaseous):	Not applicable.
Auto-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Danger of explosion:	Product is not explosive. However, formation of explosive air
	vapor mixtures are possible.
Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
Oxidizing properties:	Non-oxidizing.
Vapor pressure:	Not determined.
Density:	0.89 g/cm³ (7.43 lbs/gal)
[·] Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wa	ter): Not determined.
Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
Other information	No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available.

· Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

[•] Possibility of hazardous reactions

Flammable liquid and vapor.

Used empty containers may contain product gases which form explosive mixtures with air.

· Conditions to avoid Excessive heat.

· Incompatible materials Oxidizers, strong bases, strong acids

[·] Hazardous decomposition products

Under fire conditions only:

(Cont'd. on page 6)

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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(Cont'd. of page 5)

Carbon monoxide and carbon dioxide

11 Toxicological information Information on toxicological effects • Acute toxicity: Based on available data, the classification criteria are not met. · LD/LC50 values that are relevant for classification: 64-17-5 Ethanol 7060 mg/kg (rat) Oral LD50 Inhalative LC50/4h 20000 mg/l (rat) · Primary irritant effect: · On the skin: Based on available data, the classification criteria are not met. · On the eye: Causes serious eye irritation. · Sensitization: Based on available data, the classification criteria are not met. · IARC (International Agency for Research on Cancer): 64-17-5 Ethanol 1 · NTP (National Toxicology Program): None of the ingredients are listed. **OSHA-Ca** (Occupational Safety & Health Administration): None of the ingredients are listed. Probable route(s) of exposure: Ingestion. Inhalation. Eve contact. Skin contact. • Acute effects (acute toxicity, irritation and corrosivity): Causes serious eye irritation. · Germ cell mutagenicity: Based on available data, the classification criteria are not met. · Carcinogenicity: Based on available data, the classification criteria are not met. • **Reproductive toxicity:** Based on available data, the classification criteria are not met. • STOT-single exposure: Based on available data, the classification criteria are not met. • STOT-repeated exposure: Based on available data, the classification criteria are not met. · Aspiration hazard: Based on available data, the classification criteria are not met. **12 Ecological information** · Toxicity · Aquatic toxicity No relevant information available. · Persistence and degradability No relevant information available. · Bioaccumulative potential: No relevant information available. · Mobility in soil: No relevant information available.

- [•] Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Other adverse effects No relevant information available.

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13 Disposal considerations

· Waste treatment methods

· Recommendation:

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

[·] Uncleaned packagings

• Recommendation: Disposal must be made according to official regulations.

Number	
, ADR/RID/ADN, IMDG, IATA	UN1170
proper shipping name	
	Ethanol solutions
R/RID/ADN, IMDG	ETHANOL SOLUTION (ETHYL ALCOHO SOLUTION)
4	ETHANOL SOLUTION
nsport hazard class(es)	
r	
SS	3
el	3
R/RID/ADN	
SS	3 (F1)
el	3
G, IATA	
SS	3
el	3
king group	
Γ, ADR/RID/ADN, IMDG, IATA	
vironmental hazards	Not applicable.

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ade name: APS Hand Sanitizer	
	(Cont'd. of pag
Special precautions for user	Warning: Flammable liquids
Hazard identification number (Kemler code):	30
EMS Number:	F-E,S-D
[•] Transport in bulk according to Annex II o MARPOL73/78 and the IBC Code	f Not applicable.
Regulatory information	
Safety, health and environmental regula mixture United States (USA) SARA	ations/legislation specific for the substance
Section 302 (extremely hazardous substances	\$):
None of the ingredients are listed.	
· Section 313 (Specific toxic chemical listings):	
None of the ingredients are listed.	
TSCA (Toxic Substances Control Act)	
All ingredients are listed or exempt.	
 Proposition 65 (California) Chemicals known to cause cancer: Ethanol - listing refers specifically to alcoholic beven 64-17-5 Ethanol 	verage consumption and is not applicable for product.
Chemicals known to cause developmental to	kicity for females:
None of the ingredients are listed.	
· Chemicals known to cause developmental to	kicity for males:
None of the ingredients are listed.	
Chemicals known to cause developmental to	
	verage consumption and is not applicable for product.
64-17-5 Ethanol	
• EPA (Environmental Protection Agency):	
None of the ingredients are listed.	
None of the ingredients are listed. IARC (International Agency for Research on C	ancer):
None of the ingredients are listed. IARC (International Agency for Research on C 64-17-5 Ethanol	cancer):
None of the ingredients are listed. IARC (International Agency for Research on C	ancer):

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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(Cont'd. of page 8) Abbreviations and acronyms: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent OSHA: Occupational Safety & Health Administration Flam. Liq. 2: Flammable liquids – Category 2 Flam. Liq. 3: Flammable liquids - Category 3 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A · Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtel.com