

# Safety Data Sheet

Issued Date: May 6, 2020

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Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name F-617 Instant Hand Sanitizer

### Other means of identification

Product Code F-617

### Recommended use of the chemical and restrictions on use

Recommended Use Hand Sanitizer

### Details of the supplier of the safety data sheet

Missouri Vocational Enterprises  
2727 Highway K  
Bonne Terre, MO 63628  
Phone: (573) 358-5516

### Emergency Telephone Number

INFOTRAC 1-800-535-5053 (North America)  
1-352-323-3500 (International)

## 2. HAZARDOUS IDENTIFICATION

Signal Word DANGER

Classification	Hazard Category
Flammable Liquids	2
Skin Irritation	2
Eye Irritation	2A
Carcinogenicity	1A
Germ Cell Mutagenicity	1B
Hazardous to the aquatic environment – Acute	3
Hazardous to the aquatic environment – Chronic	3

### Health Hazard Statement(s)

Highly flammable liquid and vapor.  
Causes skin irritation.  
Causes serious eye irritation.

Harmful to aquatic life.  
Harmful to aquatic life with long lasting effects.

### Hazard Pictogram(s)



### Hazard Ratings

	HMIS	NFPA
Health	3	3
Flammability	3	3
Reactivity	0	0
PPE	B	N/A

### Precautionary Statement(s)

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources – No smoking.  
Keep container tightly closed.  
Keep cool.  
Ground and bond container and receiving equipment.

**Hand Sanitizer****F-617****Revision Date: May 6, 2020**

Use explosion-proof electrical and ventilating equipment.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Avoid breathing mist or vapors.  
 Wash thoroughly after handling.  
 Avoid release to the environment.  
 Wear protective gloves and eye/face protection.  
 Use personal protective equipment as required.  
 IF ON SKIN (or hair): Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.  
 If skin irritation occurs: Get medical advice/attention.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: get medical advice/attention.  
 Specific treatment, see supplemental first aid information.  
 If exposed or concerned: Get medical advice/attention.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 Call a POISON CENTER or doctor/physician if you feel unwell.  
 In case of fire: Use appropriate media, Carbon Dioxide, "alcohol-type foam", or dry chemical for extinction.  
 Store in a well-ventilated place. Keep cool.  
 Keep container tightly closed.  
 Store locked up.  
 Dispose of contents and/or container in accordance with local, regional, national, and/or international regulations.

**Other Hazards**

Other hazards which do not result in classification: Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

### 3. COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name/Pure Substance	CAS #	Weight-%
Ethanol	64-17-5	70-85
Glycerin	56-81-5	1-5
Hydrogen Peroxide	7722-84-1	0.1-1.0
Denatonium Benzoate	3734-33-6	>.5

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. FIRST-AID MEASURES

<b>General Advice</b>	If you feel unwell, seek medical advice (show label where possible).
<b>Eye Contact</b>	Immediately flush eyes with water for at least 15 minutes. Obtain medical attention if irritation persists.
<b>Skin Contact</b>	None required under normal conditions. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	None required under normal conditions.
<b>Ingestion</b>	None required when used as intended. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Most important symptoms and effects**

Causes serious eye irritation. Symptoms may include redness, pain, tearing, and conjunctivitis. Direct skin contact may cause slight or mild, transient irritation. Inhalation of high concentrations may cause fatigue, difficulty breathing, headache, giddiness, mental confusion, and nausea. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition,

nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. This product is a CNS depressant.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

Suitable Extinguishing Media: Alcohol – resistant foam. Use water fog or fine spray, foams, carbon dioxide, or dry chemical. Do not use a solid water stream as it may scatter and spread fire.

Unsuitable Extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.

**Specific Hazards Arising from the Chemical**

Highly flammable: Will be easily ignited by heat, sparks, or flames. Alcohol flames may be difficult to see because they are virtually colorless. Vaporizes easily at normal temperatures. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors, or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated.

**Flammability classification (OSHA 29 CFR 1910.106)**

Flammable liquids – Category 2

**Hazardous combustion products**

Carbon monoxide, carbon dioxide, toxic vapors, gases, or particulates.

**Protective equipment and precautions for firefighters**

Protective equipment for fire-fighters: Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gases to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

Special fire-fighting procedures: Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas. Stay upwind.
<b>Environmental precautions</b>	Avoid release to the environment. Prevent entry into waterways or sewers.

**Methods and material for containment and clean up**

<b>Methods for Containment</b>	Wipe up with absorbent material (e.g. cloth, fleece).
<b>Special spill response procedures</b>	ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area) As an immediate precautionary measure, isolate spill or leak area for at least 150 feet in all directions. Stay upwind. Keep out of

low areas.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources – No smoking. Do not ingest or swallow. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store in a cool, dry, well-ventilated area. Store away from incompatible materials.  
**Incompatible Materials** Strong oxidizing agents, strong acids, alkali metals, aluminum.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL
Ethanol	Not established	1000 ppm TWA 1900 mg/m <sup>3</sup> TWA
Denatonium Benzoate	Not established	N/A
Glycerin	N/A TWA N/A STEL	15 mg/m <sup>3</sup> (mist total particulate) PEL 5 mg/m <sup>3</sup> (mist, respirable fraction) PEL
Hydrogen Peroxide	1 ppm TWA	1 ppm PEL 1.4 mg/m <sup>3</sup> PEL

### Exposure controls

Ventilation and engineering measures None required under normal conditions.

### Individual protection measures, such as personal protective equipment

Eye/Face Protection None required when used as intended.  
 Skin and Body Protection None required when used as indicated.  
 Respiratory Protection None required when used as indicated.  
 General Hygiene Considerations Observe good industrial hygiene practices.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

**Physical State** Liquid  
**Color** Clear colorless  
**Odor** Alcohol  
**Odor Threshold** 3-60 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks - Method</u>
pH	7.5-9.5	
Melting Point/Freezing Point	-89 °C (-128.2 °F)	
Boiling Point/Boiling Range	82.5 °C (180.5 °F)	
Flash Point	13 °C (55.4 °F)	Closed cup
Evaporation Rate	N/A	
Flammability (Solid, Gas)	N/A	
Upper Flammability Limits	12%	
Lower Flammability Limits	2.5%	
Vapor Pressure	24.7	
Vapor Density	N/A	
Specific Gravity	0.79	
Water Solubility	Complete	
Solubility in other solvents	Soluble in most organic solvents (e.g. ethanol, acetone, diethyl ether, chloroform)	

Partition Coefficient	0.05
Auto-ignition Temperature	399 °C (750.2 °F)
Decomposition Temperature	Not applicable
Viscosity	2.1 mPa.s @ 25°C
Volatiles (% by weight)	N/A
Volatile organic Compounds (VOC's)	N/A
Absolute pressure of container	N/A
Flame projection length	N/A
Other physical/chemical comments	None known

## 10. STABILITY AND REACTIVITY

Reactivity	Not normally reactive.
Chemical Stability	Stable under recommended storage and handling conditions prescribed.
Conditions to Avoid	Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Avoid contact with incompatible materials.
Incompatible materials	Alkali metals, acids, aluminum, strong oxidizers.
Hazardous Decomposition Products	None known, refer to hazardous combustion products in Section 5.
Possibility of Hazardous Reactions	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposures

Routes of entry inhalation	Yes
Routes of entry skin & eye	Yes
Routes of entry ingestion	Yes
Routes of exposure skin absorption	No

### Potential Health Effects

#### Signs and symptoms of short-term (acute) exposure

Sign symptoms inhalation	May cause drowsiness or dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness, and other central nervous system effects.
Sign and symptoms ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Sign and symptom skin	None expected, when used as intended. Repeated exposure may cause skin dryness or cracking.
Sign and symptom eyes	Causes serious eye irritation. Symptoms may include redness, pain, tearing, and conjunctivitis.
Potential Chronic Health Effects	Prolonged or repeated skin contact may cause drying and irritation.
Mutagenicity	Not expected to be mutagenic in humans.
Carcinogenicity	No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.
Reproductive effects & Teratogenicity	Not expected to have other reproductive effects.

<b>Sensitization to material</b>	Not expected to be a skin or respiratory sensitizer.  This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
<b>Specific target organ effects</b>	Specific target organ toxicity, single exposure – Category 3 (narcotic effects)  May cause drowsiness or dizziness. Not classified as a specific target organ toxicity – repeated exposure.
<b>Medical conditions aggravated by overexposure</b>	Pre-existing skin, eye, and respiratory disorders.
<b>Synergistic materials</b>	None known.
<b>Toxicological data</b>	There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Chemical Name	LC50 (4hr) inh.rat	LD50	
		Oral, rat	Rabbit, dermal
Ethanol	5900 mg/m <sup>3</sup> /6H	N/A	6300 mg/kg
Denatonium Benzoate	N/A	N/A	N/A
Glycerin	>2.75 mg/L (mist) (No mortality)	27,200 mg/kg	>18,700 mg/kg
Hydrogen Peroxide	0.17 mg/L 4h (no deaths)	1193 mg/kg	>2000 mg/kg

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Not expected to be harmful to aquatic organisms. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. See the following tables for individual ingredient ecotoxicity data.

Ingredients	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Ethanol	64-17-5	N/A	N/A	None
Glycerin	56-81-5	51,000-57,000 mg/L (Rainbow trout)	N/A	None
Hydrogen Peroxide	7722-84-1	16.4 mg/L (Fathead minnow)	N/A	None

Ingredients	CAS No	Toxicity to Daphnia		
		LC50 / 96h	NOEC / 21 day	M Factor
Ethanol	64-17-5	N/A	N/A	None
Glycerin	56-81-5	1851-2068 mg/L (Daphnia magna)	N/A	None
Hydrogen Peroxide	7722-84-1	2.4 mg/L Water Flea	N/A	None

Ingredients	CAS No	Toxicity to Algae		
		LC50 / 96h	NOEC / 21 day	M Factor
Ethanol	64-17-5	N/A	N/A	None
Glycerin	56-81-5	77,712 mg/L/96hr (Green algae) (QSAR)	N/A	None
Hydrogen Peroxide	7722-84-1	N/A	0.63 mg/L (Green)	None

			algae)	
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**Persistence and degradability** Readily biodegradable

**Bioaccumulation potential** Does not significantly accumulate in organisms. See the following data for ingredient information.

Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
Isopropanol (CAS 67-63-0)	0.05	1.0
Hydrogen Peroxide (CAS 7722-84-1)	1.50	No bioaccumulation
Glycerin (CAS 56-81-5)	-1.76	3.162

**Mobility in soil** No data is available on the product itself.

**Other Adverse Environmental effects** No data is available on the product itself.

### 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal** See Section 7 (Handling and Storage) for further details. Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not cut, weld, drill, or grind on or near this container.

**Methods for Disposal** Dispose in accordance with all applicable federal, state, provincial, and local regulations.

**RCRA** If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.

### 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
TDG	UN 1987	Alcohols, N.O.S.	3	II	Flammable, 3
<b>TDG Additional Information</b>	May be shipped as LIMITED QUANTITY when transported in quantities no larger than 1 Litre, in packages no exceeding 30 kg gross mass.				
49 CFR/DOT	UN 1987	Alcohols, n.o.s. (Ethanol)	3	II	Flammable, 3
<b>49 CFR/DOT Additional Information</b>	For limited quantity and other exemptions see section 173-150				
ICAO/IATA	UN 1987	Alcohol N.O.S.	3	II	Flammable, 3
<b>ICAO/IATA Additional Information</b>	Refer to IATA/ICAO packaging instruction.				
IMDG	N/A	N/A	N/A	N/A	N/A
<b>IMDG Additional Information</b>	Refer to the IMDG regulations for more information				

**Special** Keep away from heat, sparks, and open flame – No smoking.

Environmental hazards Potential marine pollutant.

Transport in bulk according to Annex II MARPOL 73/78 and the IBC Code Not available.

## 15. REGULATORY INFORMATION

### U.S. Federal Information

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS #	TSCA Inventory	CERCLA Reportable Quantity (RQ) (40 CFR 117.302)	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355	SARA TITLE III: Sec. 313, 40 CFR 372 Specific Toxic Chemical	
					Toxic Chemical	De minimus Concentration
Ethanol	64-17-5	Yes	None	None	N/A	N/A
Denatonium Benzoate	3437-33-6	Yes	None	None	N/A	N/A
Glycerin	56-81-5	Yes	None	None	No	N/Ap
Hydrogen Peroxide	7722-84-1	Yes	N/Ap	1000 lb TPO (Concentration >52%)	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Flammable, Eye Irritation, Specific target organ toxicity, single exposure.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

### US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Ethanol	64-17-5	N/A	N/Ap	N/A	Yes	N/A	Yes	Yes	N/A
Denatonium Benzoate	3437-33-6	N/A	N/A	N/A	Yes	N/A	Yes	No	N/A
Glycerin	56-81-5	No	N/Ap	No	Yes	Yes	No	Yes	Yes
Hydrogen Peroxide	7722-84-1	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes

### Canadian Information:

WHMIS Classification: Refer to Section 2 for a WHMIS Classification for this product.  
All ingredients are present on the DSL.

### International Information:

Components listed below are present on the following International Inventory List:

Ingredients	CAS #	European EINECs	Australia AICS	Phillippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
Glycerin	56-81-5	200-289-5	Present	Present	(7)-338; (2)-242	KE-29297	Present	May be used as a single



								component chemical under an appropriate group standard
Hydrogen Peroxide	7722-84-1	231-765-0	Present	Present	(1)-419	KE-20204	Present	HSR001326 HSR001449 HSR001450 (dilution)

## 16. OTHER INFORMATION

### 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 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.

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