

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** PURELL ® Foaming Hand Sanitizer

**Other means of identification** None.

**Recommended use** Hand sanitizer.

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** GOJO Industries, Inc.  
**Address** One GOJO Plaza, Suite 500  
Akron, OH 44311  
USA  
**Telephone** (330) 255-6000  
**E-mail** Not available.

**Emergency phone number** 1-800-424-9300 CHEMTREC

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
Gases under pressure Liquefied gas

**Health hazards** Serious eye damage/eye irritation Category 2

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation.

### Precautionary statement

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. Wear eye protection/face protection.

**Response** 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.

**Storage** Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Ethanol	64-17-5	>50
1,1-difluoroethane	75-37-6	<5
Cetostearyl alcohol	67762-27-0	<5
Isobutane	75-28-5	<2

**Composition comments** Components not listed are either non-hazardous or are below reportable limits.

#### 4. First-aid measures

**Inhalation** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**Skin contact** Get medical attention if irritation develops and persists.

**Eye contact** Flush eyes thoroughly with water for at least 15 minutes. If irritation occurs, get medical assistance.

**Ingestion** Rinse mouth thoroughly with water and give large amounts of water to people not unconscious. Seek medical attention if discomfort persists.

**Most important symptoms/effects, acute and delayed** Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

**Indication of immediate medical attention and special treatment needed** Treat symptomatically.

**General information** First aid personnel must be aware of own risk during rescue.

#### 5. Fire-fighting measures

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, water spray or alcohol resistant foam.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** Flammable aerosol - may cause flash fire.

**Special protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Use standard firefighting procedures and consider the hazards of other involved materials. Containers close to fire should be removed immediately or cooled with water.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate the area. Avoid inhalation of vapors and contact with skin and eyes. Wear appropriate personal protective equipment (See Section 8).

**Methods and materials for containment and cleaning up** Remove sources of ignition.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece).

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

**Environmental precautions** No specific precautions.

#### 7. Handling and storage

**Precautions for safe handling** Avoid inhalation of vapors and spray mist and contact with skin and eyes. Do not smoke and do not spray near an open flame or other sources of ignition. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Follow rules for flammable liquids. Keep away from heat, sparks and open flame. No special restrictions on storage with other products.

#### 8. Exposure controls/personal protection

##### Occupational exposure limits

##### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanol (CAS 64-17-5)	PEL	1900 mg/m <sup>3</sup> 1000 ppm

##### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Isobutane (CAS 75-28-5)	STEL	1000 ppm

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3 1000 ppm
Isobutane (CAS 75-28-5)	TWA	1900 mg/m3 800 ppm

## US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1,1-difluoroethane (CAS 75-37-6)	TWA	2700 mg/m3 1000 ppm

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields. Applicable for industrial settings only.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves. Applicable for industrial settings only.
<b>Other</b>	Wear suitable protective clothing. Applicable for industrial settings only.
<b>Respiratory protection</b>	Not normally needed.
<b>Thermal hazards</b>	Not applicable.

## 9. Physical and chemical properties

<b>Appearance</b>	White foam.
<b>Physical state</b>	Liquid, Gas.
<b>Form</b>	Aerosol liquid.
<b>Color</b>	White.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.

Viscosity Not available.

**Other information**

**Explosive properties** Not explosive.

**Oxidizing properties** Not oxidizing.

**10. Stability and reactivity**

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.

**Conditions to avoid** Heat. Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

**11. Toxicological information**

**Information on likely routes of exposure**

**Inhalation** Prolonged inhalation may be harmful.

**Skin contact** No adverse effects due to skin contact are expected.

**Eye contact** Causes serious eye irritation.

**Ingestion** Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Headache. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

**Information on toxicological effects**

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	39 g/m3, 4 Hours
<i>Oral</i>		
LD50	Rat	7000 - 11000 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Ethanol (CAS 64-17-5)			
<b>Aquatic</b>			
Crustacea	LC50	Ceriodaphnia dubia	5012 mg/l, 48 hours
		Daphnia magna	454 mg/l, 11 days
	NOEC	Ceriodaphnia dubia	9.6 mg/l
Fish	LC50	Pimephales promelas	13480 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

1,1-difluoroethane (CAS 75-37-6)	0.75
Ethanol (CAS 64-17-5)	-0.31
Isobutane (CAS 75-28-5)	2.76

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## 14. Transport information

### DOT

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable, (each not exceeding 1 L capacity)
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	N82
<b>Packaging exceptions</b>	306
<b>Packaging non bulk</b>	None
<b>Packaging bulk</b>	None

### IATA

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	10L

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

**UN number** UN1950  
**UN proper shipping name** AEROSOLS  
**Transport hazard class(es)**

**Class** 2.1

**Subsidiary risk** -

**Packing group** Not applicable.

**Environmental hazards**

**Marine pollutant** No.

**EmS** F-D, S-U

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

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

**General information**

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Isobutane (CAS 75-28-5) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

1,1-difluoroethane (CAS 75-37-6)

Isobutane (CAS 75-28-5)

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

1,1-difluoroethane (CAS 75-37-6)

Ethanol (CAS 64-17-5)

Isobutane (CAS 75-28-5)

**US. New Jersey Worker and Community Right-to-Know Act**

1,1-difluoroethane (CAS 75-37-6)

Ethanol (CAS 64-17-5)

Isobutane (CAS 75-28-5)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Ethanol (CAS 64-17-5)

Isobutane (CAS 75-28-5)

**US. Rhode Island RTK**

1,1-difluoroethane (CAS 75-37-6)

Isobutane (CAS 75-28-5)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	22-June-2015
<b>Revision date</b>	-
<b>Version #</b>	01
<b>HMIS® ratings</b>	Health: 1 Flammability: 4 Physical hazard: 3

**NFPA ratings****Disclaimer**

GOJO Industries, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.