# PURELL® Advanced Hand Sanitizer Foam



## SECTION 1. IDENTIFICATION

Product name : PURELL® Advanced Hand Sanitizer Foam

**Manufacturer or supplier's details**

Company name of supplier : GOJO Industries, Inc.
Address : One GOJO Plaza, Suite 500
Akron, Ohio 44311
Telephone : 1 (330) 255-6000

Emergency telephone number : CHEMTREC 1-800-424-9300
CHEMTREC +1-703-527-3887: Outside USA & CANADA

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

Recommended use : Hand Sanitizer
Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Flammable liquids : Category 3

Eye irritation : Category 2A

**GHS label elements**

Hazard pictograms :



Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear eye protection/ face protection.
**Response:**
P305 + P351 + P338 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 dry sand, dry chemical or alcohol-resistant foam to extinguish.
**Storage:**
P403 + P235 Store in a well-ventilated place. Keep cool.
**Disposal:**
P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Hazardous components**

| Chemical name | CAS-No. | Concentration (%) |
|---|---|---|
| Ethyl Alcohol | 64-17-5 | >= 60 - < 70 |
| Isopropyl Alcohol | 67-63-0 | >= 1 - < 5 |

## SECTION 4. FIRST AID MEASURES

| | | |
|---|---|---|
| General advice | : | In the case of accident or if you feel unwell, seek medical advice immediately.<br>When symptoms persist or in all cases of doubt seek medical advice. |
| If inhaled | : | If inhaled, remove to fresh air.<br>If symptoms persist, call a physician. |
| In case of skin contact | : | Wash with water and soap as a precaution.<br>Get medical attention if irritation develops and persists. |
| In case of eye contact | : | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.<br>If easy to do, remove contact lens, if worn.<br>Seek medical advice. |
| If swallowed | : | Do NOT induce vomiting.<br>Rinse mouth with water.<br>Obtain medical attention. |
| Most important symptoms and effects, both acute and delayed | : | Causes serious eye irritation. |
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection and use the recommended protective clothing |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | : | High volume water jet |
| Specific hazards during firefighting | : | Do not use a solid water stream as it may scatter and spread fire.<br>Cool closed containers exposed to fire with water spray.<br>Flash back possible over considerable distance.<br>May form explosive mixtures in air.<br>Exposure to decomposition products may be a hazard to health.<br>Carbon oxides<br>Silicon oxides |
| Hazardous combustion products | : | Carbon oxides<br>Silicon oxides |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers. |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.<br>Ensure adequate ventilation.<br>Remove all sources of ignition.<br>Evacuate personnel to safe areas.<br>Keep people away from and upwind of spill/leak.<br>Material can create slippery conditions. |
| Environmental precautions | : | Discharge into the environment must be avoided.<br>Prevent further leakage or spillage if safe to do so.<br>Retain and dispose of contaminated wash water.<br>Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Non-sparking tools should be used.<br>Soak up with inert absorbent material.<br>Suppress (knock down) gases/vapours/mists with a water spray jet.<br>Keep in suitable, closed containers for disposal.<br>Clean contaminated floors and objects thoroughly while observing environmental regulations. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | For personal protection see section 8.<br>Keep away from heat.<br>Use with local exhaust ventilation.<br>Avoid contact with eyes. |
| Conditions for safe storage | : | Take measures to prevent the build up of electrostatic charge.<br>Keep in properly labelled containers.<br>Keep container tightly closed in a dry and well-ventilated place.<br>Store in accordance with the particular national regulations. |

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| Ethyl Alcohol | 64-17-5 | TWA | 1,000 ppm<br>1,900 mg/m3 | NIOSH REL |
| | | TWA | 1,000 ppm<br>1,900 mg/m3 | OSHA Z-1 |
| | | STEL | 1,000 ppm | ACGIH |
| Isopropyl Alcohol | 67-63-0 | TWA | 200 ppm | ACGIH |
| | | STEL | 400 ppm | ACGIH |
| | | TWA | 400 ppm<br>980 mg/m3 | NIOSH REL |
| | | ST | 500 ppm<br>1,225 mg/m3 | NIOSH REL |
| | | TWA | 400 ppm<br>980 mg/m3 | OSHA Z-1 |

**Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---|---|---|---|---|---|---|
| Isopropyl Alcohol | 67-63-0 | Acetone | Urine | End of shift at end of workweek | 40 mg/l | ACGIH BEI |

**Personal protective equipment**

| | | |
|---|---|---|
| Respiratory protection | : | No personal respiratory protective equipment normally required. |
| Hand protection | | |
| Remarks | : | No special protective equipment required. |
| Eye protection | : | Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection | : | No special measures necessary provided product is used correctly. |
| Protective measures | : | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.<br>Ensure that eye flushing systems and safety showers are located close to the working place. |

| | | |
|---|---|---|
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice.<br>Avoid contact with eyes. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | liquid |
| Colour | : | clear, colourless, yellow |
| Odour | : | like fruit |
| Odour Threshold | : | No data available |
| pH | : | 6 - 9, (20 °C) |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | 74.00 °C |
| Flash point | : | 27.00 °C |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | Not applicable |
| Flammability (liquids) | : | No data available |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density | : | No data available |
| Density | : | 0.8730 g/cm3 |
| Solubility(ies) | | |
| Water solubility | : | soluble |
| Partition coefficient: n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | No data available |
| Thermal decomposition | : | The substance or mixture is not classified self-reactive. |
| Viscosity | | |
| Viscosity, kinematic | : | 10 - 20 mm2/s (20 °C) |
| Explosive properties | : | Not explosive |
| Oxidizing properties | : | The substance or mixture is not classified as oxidizing. |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | Not classified as a reactivity hazard. |
| Chemical stability | : | Stable under normal conditions. |

| | | |
|---|---|---|
| Possibility of hazardous reactions | : | Vapours may form explosive mixture with air. |
| Conditions to avoid | : | Heat, flames and sparks. |
| Incompatible materials | : | Strong oxidizing agents<br>Flammable solids<br>Water-reactive substances |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**
Inhalation
Eye contact
Skin contact

**Acute toxicity**

Not classified based on available information.

**Components:**

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): 124.7 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |

**Isopropyl Alcohol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): 72.6 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapour |
| Acute dermal toxicity | : | LD50 (Rat): > 5,000 mg/kg |

**Skin corrosion/irritation**

Not classified based on available information.

**Components:**

**Ethyl Alcohol:**
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

**Isopropyl Alcohol:**
Species: Rabbit
Result: No skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Components:**

**Ethyl Alcohol:**
Species: Rabbit

Result: Irritation to eyes, reversing within 21 days
Method: OECD Test Guideline 405

**Isopropyl Alcohol:**
Species: Rabbit
Result: Irritation to eyes, reversing within 21 days

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.

**Components:**

**Ethyl Alcohol:**
Test Type: Local lymph node assay (LLNA)
Exposure routes: Skin contact
Species: Mouse
Result: negative

**Isopropyl Alcohol:**
Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Rodent dominant lethal test (germ cell) (in vivo)<br>Test species: Mouse<br>Application Route: Ingestion<br>Result: negative |

**Isopropyl Alcohol:**

| | | |
|---|---|---|
| Genotoxicity in vitro | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Result: negative |
| Genotoxicity in vivo | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Test species: Mouse<br>Application Route: Intraperitoneal injection<br>Result: negative |

**Carcinogenicity**

Not classified based on available information.

**Components:**

**Isopropyl Alcohol:**
Species: Rat

Application Route: inhalation (vapour)
Exposure time: 104 weeks
Method: OECD Test Guideline 451
Result: negative

| | |
|---|---|
| **IARC** | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| **OSHA** | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |
| **NTP** | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |

**Reproductive toxicity**

Not classified based on available information.

**Components:**

**Ethyl Alcohol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

**Isopropyl Alcohol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Result: negative

**STOT - single exposure**

Not classified based on available information.

**Components:**

**Isopropyl Alcohol:**

Assessment: May cause drowsiness or dizziness.

**STOT - repeated exposure**

Not classified based on available information.

**Repeated dose toxicity**

**Components:**

**Ethyl Alcohol:**

Species: Rat
NOAEL: 2,400 mg/kg

Application Route: Ingestion
Exposure time: 2 y

**Isopropyl Alcohol:**
Species: Rat
NOAEL: 5000 ppm
Application Route: inhalation (vapour)
Exposure time: 104 w
Method: OECD Test Guideline 413

**Aspiration toxicity**

Not classified based on available information.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 1,000 mg/l<br>Exposure time: 48 h |
| Toxicity to algae | : | EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 9.6 mg/l<br>Exposure time: 9 d |
| Toxicity to bacteria | : | EC50 (Photobacterium phosphoreum): 32.1 mg/l<br>Exposure time: 0.25 h |

**Isopropyl Alcohol:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l<br>Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 10,000 mg/l<br>Exposure time: 24 h |
| Toxicity to bacteria | : | EC50 (Pseudomonas putida): > 1,050 mg/l<br>Exposure time: 16 h |

**Persistence and degradability**

**Components:**

**Ethyl Alcohol:**

| | | |
|---|---|---|
| Biodegradability | : | Result: Readily biodegradable.<br>Biodegradation: 84 %<br>Exposure time: 20 d |

**Isopropyl Alcohol:**

Biodegradability : Result: rapidly degradable

**Bioaccumulative potential**

**Components:**

**Ethyl Alcohol:**
Partition coefficient: n-octanol/water : log Pow: -0.35

**Isopropyl Alcohol:**
Partition coefficient: n-octanol/water : log Pow: 0.05

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

| | |
|---|---|
| Regulation | 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances |
| Remarks | This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). |

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14. TRANSPORT INFORMATION

**International Regulation**

**IATA-DGR**

UN/ID No. : UN 1987
Proper shipping name : Alcohols, n.o.s.
(Ethanol, Propan-2-ol)
Class : 3
Packing group : III
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

**IMDG-Code**

UN number : UN 1987
Proper shipping name : ALCOHOLS, N.O.S.
(Ethanol, Propan-2-ol)
Class : 3

| | | |
|---|---|---|
| Packing group | : | III |
| Labels | : | 3 |
| EmS Code | : | F-E, S-D |
| Marine pollutant | : | no |

**National Regulations**

**49 CFR**

| | | |
|---|---|---|
| UN/ID/NA number | : | UN 1987 |
| Proper shipping name | : | Alcohols, n.o.s. |
| Class | : | 3 |
| Packing group | : | III |
| ERG Code | : | 127 |
| Marine pollutant | : | no |

## SECTION 15. REGULATORY INFORMATION

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| Isopropyl Alcohol | 67-63-0 | 3.4086 % |

**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

| | | |
|---|---|---|
| Ethyl Alcohol | 64-17-5 | 65.2821 % |
| Isopropyl Alcohol | 67-63-0 | 3.4086 % |

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

**California Prop 65** This product does not require a warning label under California Proposition 65.

**The components of this product are reported in the following inventories:**

| | | |
|---|---|---|
| TSCA | : | On TSCA Inventory |
| AICS | : | On the inventory, or in compliance with the inventory |
| DSL | : | On the inventory, or in compliance with the inventory |
| ENCS | : | On the inventory, or in compliance with the inventory |
| ISHL | : | On the inventory, or in compliance with the inventory |

| | | |
|---|---|---|
| KECI | : | On the inventory, or in compliance with the inventory |
| PICCS | : | On the inventory, or in compliance with the inventory |
| IECSC | : | On the inventory, or in compliance with the inventory |
| NZIoC | : | On the inventory, or in compliance with the inventory |

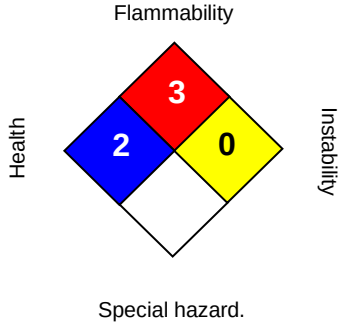
**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

## SECTION 16. OTHER INFORMATION

**Further information**

**NFPA:**




**HMIS III:**

| | |
|---|---|
| HEALTH | 2 |
| FLAMMABILITY | 3 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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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.