

**PURELL® Advanced Hand Rub**

Version	Revision Date:	SDS Number:	Date of last issue: 05/03/2017
1.1	02/08/2018	400000000410	Date of first issue: 05/03/2017

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**SECTION 1. IDENTIFICATION**

Product name : PURELL® Advanced Hand Rub

**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.

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**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Flammable liquids : Category 3

Eye irritation : Category 2A

**GHS label elements**

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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 (% w/w)
Ethyl Alcohol	64-17-5	>= 50 - < 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.

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- When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : If inhaled, remove to fresh air.  
If symptoms persist, call a physician.
- In case of skin contact : Wash with water and soap as a precaution.  
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.  
If easy to do, remove contact lens, if worn.  
Seek medical advice.
- If swallowed : If swallowed, DO NOT induce vomiting.  
Rinse mouth with water.  
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

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**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 fire-fighting : Do not use a solid water stream as it may scatter and spread fire.  
Cool closed containers exposed to fire with water spray.  
Flash back possible over considerable distance.  
May form explosive mixtures in air.  
Exposure to decomposition products may be a hazard to health.
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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for firefighters Use personal protective equipment.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Material can create slippery conditions.
- Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
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.  
Soak up with inert absorbent material.  
Suppress (knock down) gases/vapours/mists with a water spray jet.  
Keep in suitable, closed containers for disposal.  
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.  
Keep away from heat.  
Use with local exhaust ventilation.  
Avoid contact with eyes.
- Conditions for safe storage : Take measures to prevent the build up of electrostatic charge.  
Keep in properly labelled containers.  
Keep container tightly closed in a dry and well-ventilated place.  
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 1,880 mg/m <sup>3</sup>	CA AB OEL
		STEL	1,000 ppm	CA BC OEL
		TWAEV	1,000 ppm 1,880 mg/m <sup>3</sup>	CA QC OEL
Isopropyl Alcohol	67-63-0	STEL	1,000 ppm	ACGIH
		TWA	200 ppm	CA AB OEL

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			492 mg/m <sup>3</sup>	
		STEL	400 ppm 984 mg/m <sup>3</sup>	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	400 ppm	CA BC OEL
		TWAEV	400 ppm 983 mg/m <sup>3</sup>	CA QC OEL
		STEV	500 ppm 1,230 mg/m <sup>3</sup>	CA QC OEL
		TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sam-pling time	Permissible concentra-tion	Basis
Isopropyl Alcohol	67-63-0	Acetone	Urine	End of shift at end of work-week	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.  
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.  
Avoid contact with eyes.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : liquid
- Colour : clear, colourless, yellow
- Odour : alcohol-like

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Odour Threshold	:	No data available
pH	:	6.5 - 8.5 (20 °C)
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	24 °C
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	0.8743 g/cm <sup>3</sup>
Solubility(ies)	:	
Water solubility	:	soluble
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	The substance or mixture is not classified self-reactive.
Viscosity	:	
Viscosity, kinematic	:	3500 - 23000 mm <sup>2</sup> /s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

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**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

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Hazardous decomposition products            :    No hazardous decomposition products are known.

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**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  
Exposure time: 4 h  
Test atmosphere: vapour

**Isopropyl Alcohol:**

Acute oral toxicity                                :    LD50 (Rat): > 5,000 mg/kg  
  
Acute inhalation toxicity                        :    LC50 (Rat): 72.6 mg/l  
Exposure time: 4 h  
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

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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 Result: negative
Genotoxicity in vivo	:	Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Ingestion Result: negative

**Isopropyl Alcohol:**

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative





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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.

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**SECTION 12. ECOLOGICAL INFORMATION**
**Ecotoxicity**
**Components:**
**Ethyl Alcohol:**

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

**Isopropyl Alcohol:**

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

**Persistence and degradability**
**Components:**
**Ethyl Alcohol:**



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Biodegradability : Result: Readily biodegradable.  
Biodegradation: 84 %  
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

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## 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.

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## 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

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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**
**TDG**

UN number : UN 1987  
 Proper shipping name : ALCOHOLS, N.O.S.  
 (Ethanol, Propan-2-ol)  
 Class : 3  
 Packing group : III  
 Labels : 3  
 ERG Code : 127  
 Marine pollutant : no

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**SECTION 15. REGULATORY INFORMATION**
**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

**Canadian lists**

No substances are subject to a Significant New Activity Notification.

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**SECTION 16. OTHER INFORMATION**
**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% re-

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sponse; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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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.

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