

Version 1.0 SDS Number: 400000005458 Revision Date: 08/09/2017

#### **SECTION 1. IDENTIFICATION**

Product name : PURELL® Professional Surface Disinfectant –

Citrus - Finished Product Use only

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

1-800-424-9300 CHEMTREC

Recommended use of the chemical and restrictions on use

Recommended use : Disinfectants and general biocidal products

#### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids : Category 3

**GHS** label elements

Hazard pictograms



Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.

Precautionary statements : **Prevention**:

P210 Keep away from heat/sparks/open flames/hot surfaces. -

No smoking.

P233 Keep container tightly closed. P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

Response:

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.



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### Other hazards

None known.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

## **Hazardous components**

Chemical name	CAS-No.	Concentration (%)
Ethyl Alcohol	64-17-5	>= 20 - < 35
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.

If inhaled : If sensitivity occurs, remove to fresh air.

If symptoms persist, call a physician.

In case of skin contact : If sensitivity occurs, wash with soap and water.

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 : Rinse mouth with water. Obtain medical attention.

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 : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

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.

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



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health.

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 : 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.

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.

Material can create slippery conditions.

Environmental precautions : Discharge

Discharge into the environment must be avoided.
 Prevent further leakage or spillage if safe to do so.
 Retain and dispose of contaminated wash water.

Methods and materials for containment and cleaning up

: Non-sparking tools should be used.

Soak up with inert absorbent material.

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 : Avoid contact with eyes.

Conditions for safe storage : No smoking.

Take measures to prevent the build up of electrostatic charge. 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 1,900 mg/m3	NIOSH REL



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		TWA	1,000 ppm 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 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1

### **Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Samplin g time	Permissible concentratio n	Basis
Isopropyl Alcohol	67-63-0	Acetone	Urine	End of shift at end of workwee k	40 mg/l	ACGIH BEI

## Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

Eye protection : No special measures necessary provided product is used

correctly.

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.

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 : colourless

Odour : citrus



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Odour Threshold : No data available

pH : 12.5 - 13.3, (25°C)

Melting point/freezing point : No data available

Initial boiling point and boiling

range

: 88 °C

Flash point : 30.5 °C

Method: Pensky-Martens closed cup

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

Relative density : No data available

Density : 0.956 g/cm3

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

: Not applicable

Auto-ignition temperature : not determined

Thermal decomposition : The substance or mixture is not classified self-reactive.

Viscosity

Viscosity, dynamic : 2.6 mPa.s

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 : Vapours may form explosive mixture with air.



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reactions

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

: No hazardous decomposition products are known.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

## Information on likely routes of exposure

Inhalation Skin contact Eye 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

Not classified based on available information.

### 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)

Test 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)
Test species: Mouse

Application Route: Intraperitoneal injection

Result: negative

### Carcinogenicity

Not classified based on available information.

#### Components:

**Isopropyl Alcohol:** 

Species: Rat



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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 : Test Type: Embryo-foetal development

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



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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

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:** 

Biodegradability : Result: Readily biodegradable.

Biodegradation: 84 % Exposure time: 20 d



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**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.

**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 : 366

aircraft)

Packing instruction : 355

(passenger aircraft)

**IMDG-Code** 

UN number : UN 1987

Proper shipping name : ALCOHOLS, N.O.S.

(Ethanol, Propan-2-ol)



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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.

(Ethanol, Propan-2-ol)

Class : 3
Packing group : III
ERG Code : 127
Marine pollutant : no

#### **SECTION 15. REGULATORY INFORMATION**

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

## **CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Potassium Hydroxide	1310-58-3	1000	*

<sup>\*:</sup> Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire 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 1.5465 %

### 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 29.6192 % Isopropyl Alcohol 67-63-0 1.5465 %

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

#### **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:



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Potassium Hydroxide 1310-58-3 0.2957 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table

117.3:

Potassium Hydroxide 1310-58-3 0.2957 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section

**US State Regulations** 

**Massachusetts Right To Know** 

Ethyl Alcohol 64-17-5 20 - 30 % Isopropyl Alcohol 67-63-0 1 - 5 %

Pennsylvania Right To Know

 Water (Aqua)
 7732-18-5
 50 - 70 %

 Ethyl Alcohol
 64-17-5
 20 - 30 %

 Isopropyl Alcohol
 67-63-0
 1 - 5 %

 Potassium Hydroxide
 1310-58-3
 0.1 - 1 %

**New Jersey Right To Know** 

 Water (Aqua)
 7732-18-5
 50 - 70 %

 Ethyl Alcohol
 64-17-5
 20 - 30 %

 Isopropyl Alcohol
 67-63-0
 1 - 5 %

California Prop 65 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

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 : All components of this product are on the Canadian DSL.

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** 

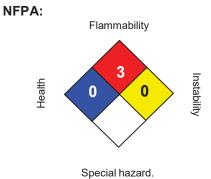
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)



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### **SECTION 16. OTHER INFORMATION**

### **Further information**



### HMIS III:

HEALTH	0
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.