Version 1.1

SDS Number: 400000000442>

Revision Date: 08/02/2020

SECTION 1. IDENTIFICATION

Product name

PURELL® Advanced Hand Sanitizer Foam

Manufacturer or supplier's details

Company name of supplier

Address

GOJO Industries, Inc.

One GOJO Plaza, Suite 500

Akron, Ohio 44311

Telephone

1 (330) 255-6000

Emergency telephone

CHEMTREC 1-800-424-9300

number

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.



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> 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/

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.

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.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled [8] 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 contact, immediately flush eyes with plenty of water

In case of eye contact for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Seek medical advice.

: Do NOT induce vomiting. Rinse mouth with water.

Obtain medical attention.

Most important symptoms and effects, both acute and

delaved

Protection of first-aiders

If swallowed

: Causes serious eye irritation.

: 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

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

health.

Carbon oxides Silicon oxides

Hazardous combustion

Specific extinguishing

products

Carbon oxides Silicon oxides

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

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. 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



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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 1,900 mg/m3 | NIOSH REL |
| | | 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 concentration | Basis |
|-------------------|---------|--------------------|---------------------|---|---------------------------|--------------|
| Isopropyl Alcohol | 67-63-0 | Acetone | Urine | End of shift at end of workwee | 40 mg/l | ACGIH BEI |

Personal protective equipment

Respiratory protection

No personal respiratory protective equipment normally

required.

Hand protection

Remarks Eye protection : No special protective equipment required.

: 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.



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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

like fruit

Odour Threshold

: No data available

pΗ

6 - 9, (20 °C)

Melting point/freezing point

: No data available

Initial boiling point and boiling

: 74.00 °C

range

Flash point

: 27.00 °C

Evaporation rate

No data available

Flammability (solid, gas)

: Not applicable

Flammability (liquids)

No data available

Upper explosion limit

Relative vapour density

No data available

Lower explosion limit

No data available

Vapour pressure

No data available

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.



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Possibility of hazardous

Incompatible materials

Conditions to avoid

reactions

: Vapours may form explosive mixture with air.

Heat, flames and sparks.Strong oxidizing agentsFlammable solids

Water-reactive substances

Hazardous decomposition : No haz

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 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

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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.

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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

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



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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

Isopropyl Alcohol:



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Biodegradability

: Result: rapidly degradable

Bioaccumulative potential

Components:

Ethyl Alcohol:

Partition coefficient: n-

: log Pow: -0.35

octanol/water

Isopropyl Alcohol:

Partition coefficient: n-

: log Pow: 0.05

octanol/water

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 Contaminated packaging Dispose of in accordance with local regulations.

: 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 1 III

Packing group

: 366

Packing instruction (cargo

aircraft)

Packing instruction

355

(passenger aircraft)

IMDG-Code

UN number

UN 1987

Proper shipping name

ALCOHOLS, N.O.S.

(Ethanol, Propan-2-ol)

Class

: 3



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Packing group § 10

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 Ш **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 % 3.4086 %

Isopropyl Alcohol 67-63-0

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



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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

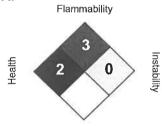
Inventories

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:



Special hazard.

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.