

Version 1.0	SDS Number: 400000005924	Revision Date: 09/17/2020
SECTION 1. IDENTIFICATION		
Product name	: PURELL® ADVANCED Hand	Sanitizer PRIME DEFENSE™
Manufacturer or supplier's	details	
Company name of supplier Address	<ul> <li>GOJO Industries, Inc.</li> <li>One GOJO Plaza, Suite 500 Akron, Ohio 44311</li> </ul>	
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 c	hemical and restrictions on use	
Recommended use Restrictions on use	<ul> <li>Hand Sanitizer</li> <li>This is a personal care or cosm consumers and other users un- foreseeable use. Cosmetics an specifically defined by regulation exempt from the requirement of While this material is not consider contains valuable information of proper use of the product for in</li> </ul>	der normal and reasonably nd consumer products, ons around the world, are of an SDS for the consumer. dered hazardous, this SDS critical to the safe handling and

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 2
Eye irritation	: Category 2A
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	<ul> <li>H225 Highly flammable liquid and vapour.</li> <li>H319 Causes serious eye irritation.</li> </ul>
Precautionary statements	<ul> <li>Prevention:</li> <li>P210 Keep away from heat/sparks/open flames/hot surfaces No smoking.</li> <li>P233 Keep container tightly closed.</li> </ul>



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	<ul> <li>P240 Ground/bond container a P241 Use explosion-proof elect equipment.</li> <li>P242 Use only non-sparking to P243 Take precautionary meas P280 Wear eye protection/ face <b>Response:</b></li> <li>P305 + P351 + P338 IF IN EYE for several minutes. Remove co to do. Continue rinsing.</li> <li>P337 + P313 If eye irritation pe attention.</li> <li>P370 + P378 In case of fire: Us alcohol-resistant foam to exting <b>Storage:</b></li> <li>P403 + P235 Store in a well-ve <b>Disposal:</b></li> <li>P501 Dispose of contents/ cont disposal plant.</li> </ul>	trical/ ventilating/ lighting/ ols. sures against static discharge. e protection. ES: Rinse cautiously with water ontact lenses, if present and eas rsists: Get medical advice/ se dry sand, dry chemical or juish.

None known.

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

#### Hazardous components

Chemical name	CAS-No.	Concentration (%)
Ethyl Alcohol	64-17-5	>= 70 - < 90
Isopropyl Alcohol	67-63-0	>= 1 - < 5

#### **SECTION 4. FIRST AID MEASURES**

General advice	<ul> <li>In the case of accident or if you feel unwell, seek medical advice immediately.</li> <li>When symptoms persist or in all cases of doubt seek medical advice.</li> </ul>
If inhaled	: If inhaled, remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Get medical attention if irritation develops and persists.
In case of eye contact	<ul> <li>In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.</li> <li>If easy to do, remove contact lens, if worn.</li> <li>Seek medical advice.</li> </ul>
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

#### SECTION 5. FIREFIGHTING MEASURES



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

: For personal protection see section 8.
Keep away from heat and flame.
Use with local exhaust ventilation.
Avoid contact with eyes.



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Conditions for safe storage	: Take measures to prevent the but Keep in properly labelled container Keep containers tightly closed in a ventilated place. Store in accordance with the parti	ers. a dry, cool and well-	

## 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 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	<ul> <li>No personal respiratory protective equipment normally required.</li> </ul>
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 protective equipment required.
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



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Appearance Colour Odour Odour Threshold	: liquid : clear, colourless : alcohol-like : No data available	
рН	: 8.8 - 10.3, (20 °C)	
Melting point/freezing point Initial boiling point and boiling	: No data available : 67 °C	
range Flash point	: 16 °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	: 0.833 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 c	lassified self-reactive.
Viscosity Viscosity, kinematic	: 1200 - 5000 mm2/s (20 °C)	
Explosive properties	: Not explosive	
Oxidizing properties	: The substance or mixture is not c	lassified 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
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 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



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#### 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

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



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	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 a	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
<b>Isopropyl Alcohol:</b> 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 a <b>Components</b> :	available information.
Isopropyl Alcohol:	drowsiness or dizziness.
STOT - repeated expos Not classified based on a	
Repeated dose toxicity	
Components: Ethyl Alcohol: Species: Rat NOAEL: 2,400 mg/kg Application Route: Inges Exposure time: 2 y	tion
Isopropyl Alcohol: Species: Rat	

Species: Rat NOAEL: 5000 ppm Application Route: inhalation (vapour)



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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	: NOEC (Daphnia magna (Water flea)): 9.6 mg/l Exposure time: 9 d
(Chronic toxicity) Toxicity to bacteria	: EC50 (Photobacterium phosphoreum): 32.1 mg/l Exposure time: 0.25 h
<b>Isopropyl Alcohol:</b> 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 degradabilit	У
<u>Components:</u> Ethyl Alcohol:	
Biodegradability	: Result: Readily biodegradable. Biodegradation: 84 % Exposure time: 20 d
<b>Isopropyl Alcohol:</b> Biodegradability	: Result: rapidly degradable
Bioaccumulative potential	
Components: Ethyl Alcohol:	
Partition coefficient: n-	: log Pow: -0.35



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octanol/water <b>Isopropyl Alcohol:</b> Partition coefficient: n- octanol/water	: log Pow: 0.05	
<b>Mobility in soil</b> No data available		
Other adverse effects No data available		
Product:		
Regulation	40 CFR Protection of Environmon Stratospheric Ozone - CAA Sec	
Remarks	This product neither contains, n Class I or Class II ODS as defin Section 602 (40 CFR 82, Subpt	ned by the U.S. Clean Air Act

# SECTION 13. DISPOSAL CONSIDERATIONS

# **Disposal methods**

Waste from residues Contaminated packaging	<ul> <li>Dispose of in accordance with local regulations.</li> <li>Dispose of as unused product.</li> <li>Empty containers should be taken to an approved waste</li> </ul>
	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	: 11
Packing instruction (cargo	: 364
aircraft)	
Packing instruction	: 353
(passenger aircraft)	
IMDG-Code	
UN number	: UN 1987
Proper shipping name	: ALCOHOLS, N.O.S.
	(Ethanol, Propan-2-ol)
Class	: 3
Packing group	: 11
Labels	: 3
EmS Code	: F-E, S-D
Marine pollutant National Regulations	: no
49 CFR	
UN/ID/NA number	: UN 1987



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Proper shipping name	: Alcohols, n.o.s.		
Class	: 3		
Packing group	: 11		
ERG Code	: 127		
Marine pollutant	: no		

#### SECTION 15. REGULATORY INFORMATION

<b>EPCRA</b>	- Emergency	Planning	and Communit	ty Right-to-Know Act
	Entergeney	i lanning		ly high to have Aut

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	4.2525 %

#### 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	81.4464 %
Isopropyl Alcohol	67-63-0	4.2525 %

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

#### Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

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	: 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				

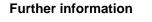


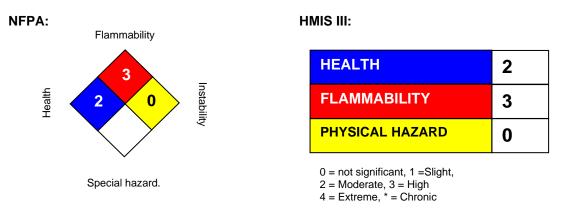
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PICCS	: On the inventory, or in complian	ce with the inventory
IECSC	: On the inventory, or in complian	ce with the inventory
NZIoC	: On the inventory, or in complian	ce with the inventory

## 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





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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.