



## **PURELL® Advanced Hand Sanitizer Gel**

Version

Revision Date: 02/10/2015

MSDS Number: 36779-00002

Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

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

Product name

PURELL® Advanced Hand Sanitizer Gel

#### Manufacturer or supplier's details

Company name of supplier

: GOJO Industries, Inc.

Address

One GOJO Plaza, Suite 500

Akron OH 44311

Telephone

1 (330) 255-6000

Emergency telephone

1-800-424-9300 CHEMTREC

# 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 element** 

Hazard pictograms

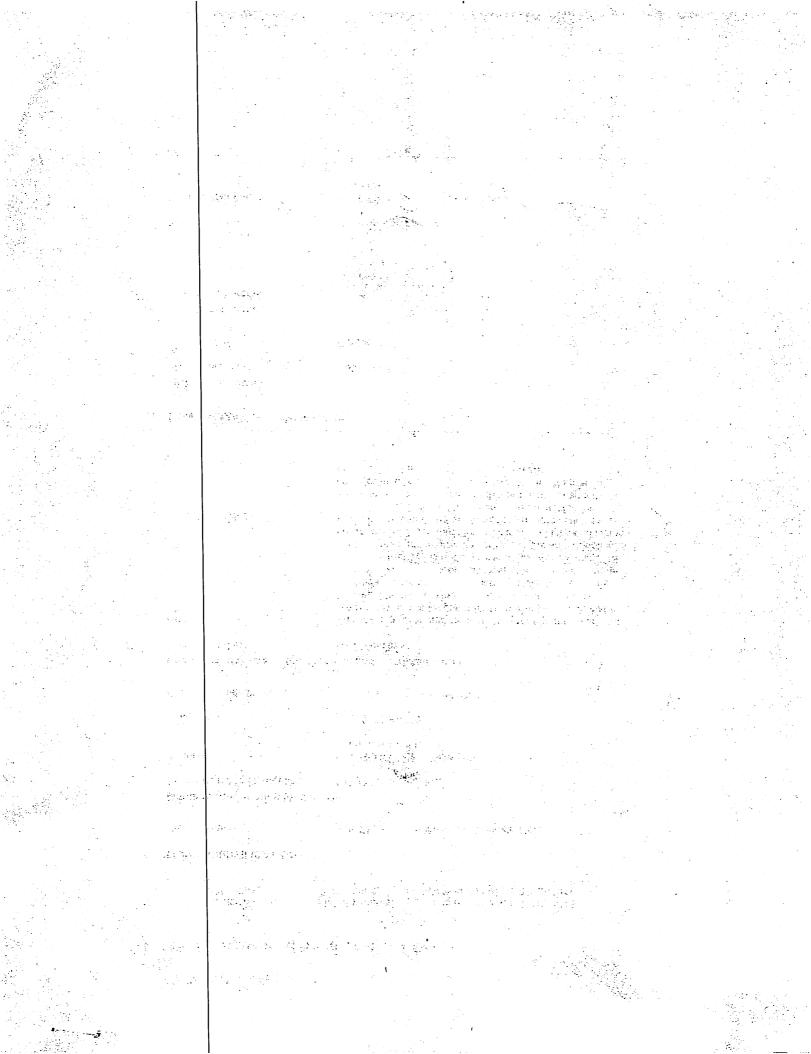


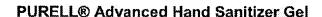
Signal Word

Warning

Hazard Statements

H226 Flammable liquid and vapor. H319 Causes serious eye irritation.







Version

Revision Date: 02/10/2015

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Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

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**Precautionary Statements** 

: Prevention:

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

No smoking.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical/ ventilating/ lighting/

equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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. 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

Vapors may form explosive mixture with air.

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

Substance / Mixture

: Mixture

#### Hazardous ingredients

Chemical Name		CAS-No.	Concentration (%)
Ethanol	 ***************************************	 64-17-5	>= 50 - < 70
Propan-2-ol	 	 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

: If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact

: Wash with water and soap as a precaution.

Get medical attention if symptoms occur.

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.

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## PURELL® Advanced Hand Sanitizer Gel

Version 1,1

**Revision Date:** 02/10/2015

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Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

Get medical attention.

If swallowed

: If swallowed, DO NOT induce vemiling. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and

: Causes serious eye irritation.

delayed

Protection of first-aiders

: First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists.

Notes to physician

: Treat symptomatically and supportively.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media

Water spray

Alcohol-resistant foam

Dry chemical

Carbon dioxide (CO2)

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during fire

fighting

7 Do not use a solid water stream as it may scatter and spread

fire.

Flash back possible over considerable distance. Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucis

: 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.

Remove undamaged containers from fire area if it is safe to do

Evacuate area.

Special protective equipment

for fire-fighters

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

: Remove all sources of Ignition. Use personal protective equipment.

Follow safe handling advice and personal protective

equipment recommendations.

Environmental precautions

: Discharge into the environment must be avoided.

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Version

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1.1

36779-00002

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Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

barriers).

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/vapors/mists with a water spray

jet.

For large spills, provide diking or other appropriate

containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate

container.

Clean up remaining materials from splil with suitable

absorbent

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures

: See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation

: Use with local exhaust ventilation.

Use only in an area equipped with explosion proof exhaust

ventilation.

Advice on safe handling

: Do not breathe vapors or spray mist.

Do not swallow. Do not get in eyes.

Avoid prolonged or repeated contact with skin.

Handle in accordance with good industrial hygiene and safety

practice.

Non-sparking tools should be used.

Keep container tightly closed.

Keep away from heat and sources of ignition.

Take precautionary measures against static discharges.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage

: Keep in properly labeled containers.

Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition.

Materials to avoid

Do not store with the following product types:

Strong oxidizing agents

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Version 1.1

Revision Date: 02/10/2015

MSDS Number: 36779-00002

Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

Organic peroxides Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit

flammable gases Explosives Gases

### SECTION 8, EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanol	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
Propan-2-ol	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

Ingredients	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
Propan-2-ol	67-63-0	Acetone	Urine	End of shift at end of work- week	40 mg/l	ACGIH BEI

Engineering measures

: Minimize workplace exposure concentrations.

Use only in an area equipped with explosion proof exhaust

ventilation.

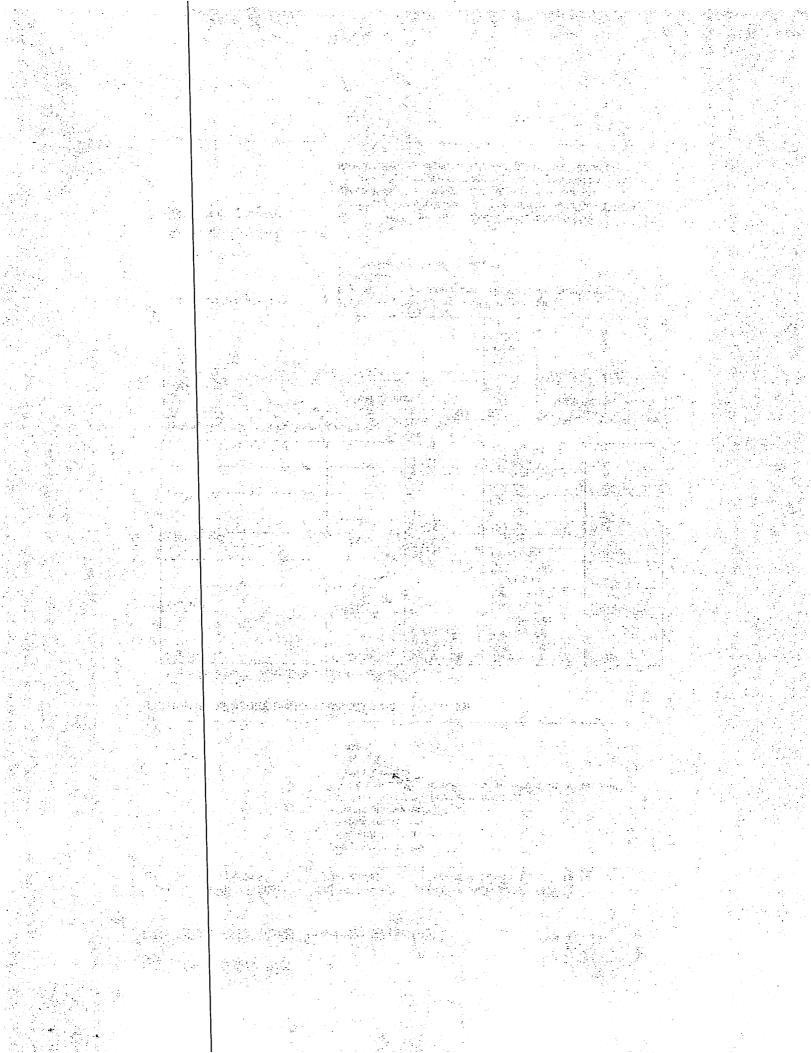
Use with local exhaust ventilation.

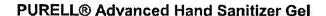
### Personal protective equipment

Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are

unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and







Version 1.1

**Revision Date:** 02/10/2015

MSDS Number:

Date of last issue: 12/12/2014

36779-00002

Date of first issue: 12/12/2014

use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide

Hand protection

Material

: Impervious gloves

Material

: Flame retardant gloves

adequate protection.

Remarks

2. Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection

Wear the following personal protective equipment:

Safety goggles

Skin and body protection

: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure

potential.

Wear the following personal protective equipment: Flame retardant antistatic protective clothing.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures

Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Color

clear, Colorless to pale yellow

Odor

: citrus

Odor Threshold

: No data available

pH

: 6.5 - 8.5

Melting point/freezing point

: No data available

Initial boiling point and boiling

: 70 °C

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Version 1.1

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Flash point

: 25 °C

Evaporation rate

: No data available

Flammability (solid, gas)

: Not applicable

Upper explosion limit

: No data available

Lower explosion limit

: No data available

Vapor pressure

: No data available

Relative vapor density

: No data available

Density

: 0.8750 g/cm3

Solubility(ies)

Water solubility

; soluble

Partition coefficient: n-

octanol/water

: Not applicable

Autoignition temperature

: No data available

Decomposition temperature

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

Viscosity

Viscosity, kinematic

3,500 - 23,000 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 reac-

tions

Flammable liquid and vapor

Vapors may form explosive mixture with air. Can read with strong oxidizing agents.

Conditions to avoid

: Heat, flames and sparks.

Incompatible materials

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 Skin contact Ingestion Eye contact

**Acute toxicity** 

Not classified based on available information.

**Product:** 

Acute oral toxicity

: Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Ingredients:

Ethanol:

Acute oral toxicity

: LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity

: LC50 (Rat): 124.7 mg/l Exposure time: 4 h

Test atmosphere: vapor

Propan-2-ol:

Acute oral toxicity

: LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity

: LC50 (Rat): 72.6 mg/l

Exposure time: 4 h Test atmosphere: vapor

Acute dermal toxicity

: LD50 (Rat): > 5,000 mg/kg

### Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Result: No skin irritation

Ingredients:

Ethanol:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Propan-2-ol: Species: Rabbit

Result: No skin irritation

Serious eye damage/eye imitation

Causes serious eye irritation.

Ingredients:

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Ethanol:

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Method: OECD Test Guideline 405

Propan-2-ol:

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Respiratory or skin sensitization

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

**Product:** 

Assessment: Does not cause skin sensitization.

ingredients:

Ethanol:

Test Type: Local lymph node assay (LLNA)

Routes of exposure: Skin contact

Species: Mouse Result: negative

Propan-2-ol:

Test Type: Buehler Test

Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Ethanol:

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

Resuit: negative

Propan-2-of:

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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## **PURELL® Advanced Hand Sanitizer Gel**

Version 1.1

Revision Date: 02/10/2015

MSDS Number: 36779-00002

Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

#### Carcinogenicity

Not classified based on available information.

Ingredients:

Propan-2-ol: Species: Rat

Application Route: inhalation (vapor)

Exposure time: 104 weeks

Method: OECD Test Guideline 451

Result: negative

IARC

No ingredient 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 ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP

No ingredient 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.

Ingredients:

Ethanol:

Effects on fertility

: Test Type: Two-generation reproduction toxicity study

Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 416

Result: negative

Propan-2-ol:

Effects on fertility

: Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative

Effects on fetal development

: Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

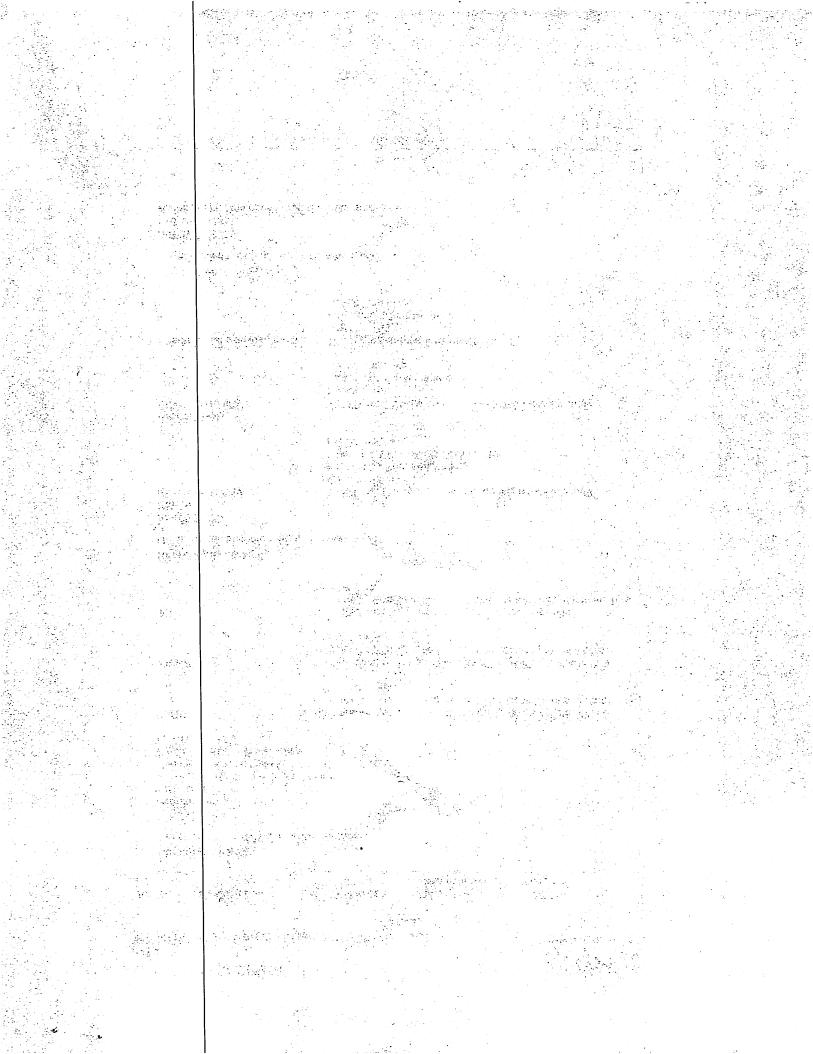
## STOT-single exposure

Not classified based on available information.

ingredients:

Propan-2-ol:

Assessment: May cause drowsiness or dizziness.





## **PURELL® Advanced Hand Sanitizer Gel**

Version 1.1

Revision Date: 02/10/2015

MSDS Number: 36779-00002

Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

### STOT-repeated exposure

Not classified based on available information.

#### Repeated dose toxicity

### Ingredients:

Ethanol: Species: Rat

NOAEL: 2,400 mg/kg

Application Route: Ingestion

Exposure time: 2 y

Propan-2-ol:

Species: Rat NOAEL: 5000 ppm

Application Route: inhalation (vapor)

Exposure time: 104 w

Method: OECD Test Guideline 413

### Aspiration toxicity

Not classified based on available information.

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

## Ingredients:

Ethanol:

Toxicity to fish

: LC50 (Pimephales prometas (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

: EG50 (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

Propan-2-ol:

Toxicity to fish

: LC50 (Pimephales prometas (fathead minnow)): 10,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

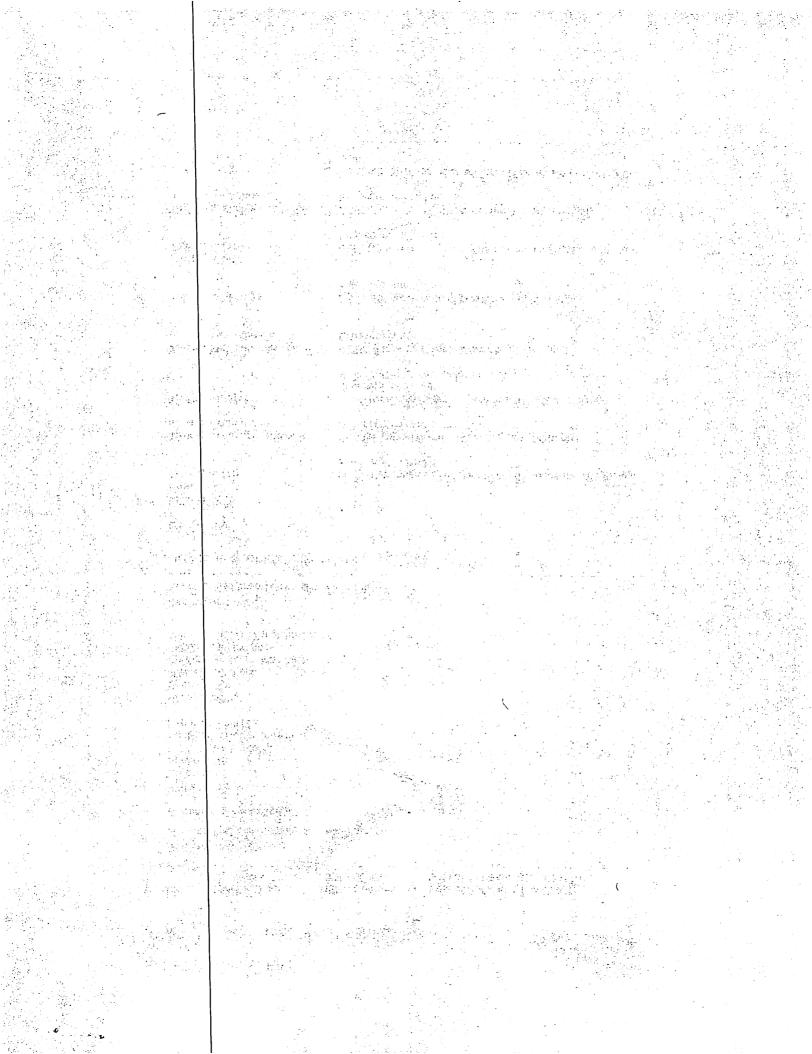
: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 24 h

Toxicity to algae

: ErC50 (Scenedesmus quadricauda (Green algae)); > 1,800

mg/l





## **PURELL® Advanced Hand Sanitizer Gel**

Version 1.1

Revision Date: 02/10/2015

MSDS Number:

Date of last Issue: 12/12/2014

36779-00002

Date of first issue: 12/12/2014

Exposure time: 8 d

Toxicity to bacteria

: EC50 (Pseudomonas putida): > 1,050 mg/l

Exposure time: 16 h

#### Persistence and degradability

Ingredients:

Ethanol:

Biodegradability

: Result: Readily biodegradable.

Biodegradation: 84 %

Exposure time: 20 d

Propan-2-ol:

Biodegradability

: Result: rapidly degradable

### **Bioaccumulative potential**

Ingredients:

Ethanol:

Partition coefficient; n-

octanol/water

: log Pow: -0.35

Propan-2-ol:

Partition coefficient: n-

octanol/water

: log Pow: 0.05

Mobility in soil

No data available

Other adverse effects

No data available

#### **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.

Do not burn, or use a cutting torch on, the empty drum.

## **SECTION 14. TRANSPORT INFORMATION**

### International Regulation

UNRTDG

**UN** number

: UN 1987

Proper shipping name

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## **PURELL® Advanced Hand Sanitizer Gel**

Versio 1.1	n	Revision Date: 02/10/2015	.,,,	DS Number: 779-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014
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E	ims Co	ode	*	F-E, S-D	

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: no

Not applicable for product as supplied.

### **Domestic regulation**

Marine pollutant

49 CFR

UN/ID/NA number : UN 1987

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

Class ; 3 Packing group ; III

Labels : FLAMMABLE LIQUID

ERG Code 5 127
Marine pollutant 5 no

# SECTION 15. REGULATORY INFORMATION

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

#### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

# SARA 384 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards Fire Hazard

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## **PURELL® Advanced Hand Sanitizer Gel**

Version 1,1	Revision Date: 02/10/2015	MSDS Number: 36779-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014					
		Acute Health	Hazard					
SARA	A 302		No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.					
SARA	4 313		The following components are subject to reporting levels established by SARA Title III, Section 313:					
		Propan-2-ol	67-63-0	3,4086 %				
us s	late Regulations							
Penn	sylvania Right To Kr	wor						
	Ethanol		64-17-5	50 - 70 %				
	Water		7732-18-5	30 - 50 %				
	Propan-2-	ol	67-63-0	1 - 5 %				
New	Jersey Right To Kno	w						
	Ethanol		64-17-5	50 - 70 %				
	Water		7732-18-5	30 - 50 %				
	Propan-2-	ol	67-63-0	1 - 5 %				
Califo	omia Prop 65	This product	does not contain any chemical	s known to the				

## The ingredients of this product are reported in the following inventories:

AICS

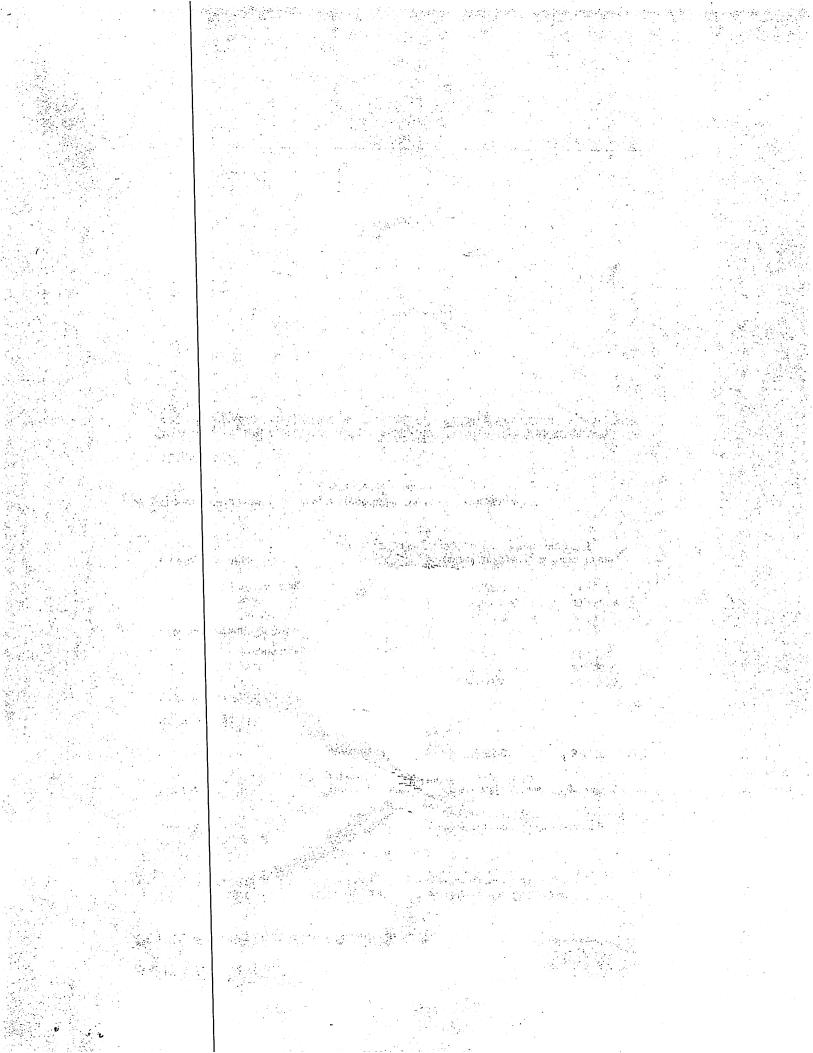
: All ingredients listed or exempt.

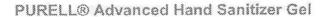
reproductive defects.

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

#### Inventories

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







Version 1.1

Revision Date: 02/10/2015

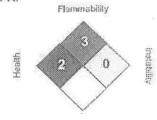
MSDS Number: 36779-00002

Date of last issue: 12/12/2014 Date of first issue: 12/12/2014

#### SECTION 16. OTHER INFORMATION

#### Further information

#### NFPA:



Special hezard.

#### HMIS III:

2
3
n

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, \* = Chronic

#### Full text of other abbreviations

**ACGIH** 

ACGIH BEI

NIOSH REL

OSHA Z-1

ACGIH / TWA ACGIH / STEL

NIOSH REL / TWA

NIOSH REL / ST

OSHA Z-1 / TWA

Sources of key data used to compile the Material Safety

Data Sheet

: USA, ACGIH Threshold Limit Values (TLV)

: ACGIH - Biological Exposure Indices (BEI)

: USA, NIOSH Recommended Exposure Limits

: USA, Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

8-hour, time-weighted average

Short-term exposure limit

Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

: 8-hour time weighted average

: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Revision Date

: 02/10/2015

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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