PURELL® Advanced Instant Hand Sanitizer



Version Revision Date: 02/10/2015

MSDS Number: 36762-00002

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

SECTION 1. IDENTIFICATION

Product name

PURELL® Advanced Instant Hand Sanitizer

Manufacturer or supplier's details

Company name of supplier GOJO Industries, Inc

One GOJO Plaza, Suite 500 Akron OH 44311

Address

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 foreseeable use. Cosmetics and consumer products consumers and other users under normal and reasonably This is a personal care or cosmetic product that is safe for exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS specifically defined by regulations around the world, are proper use of the product for industrial workplace conditions contains valuable information critical to the safe handling and employees and other users of this product. For specific spills. This SDS should be retained and available for as well as unusual and unintended exposures such as large 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

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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

for several minutes. Remove contact lenses, if present and easy all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water

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:

disposal plant P501 Dispose of contents/ container to an approved waste

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

If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

case of skin contact Wash with water and soap as a precaution Get medical attention if symptoms occur.

3

If inhaled

In case of eye contact for at least 15 minutes. In case of contact, immediately flush eyes with plenty of water

If easy to do, remove contact lens, if worn

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Get medical attention.

If swallowed If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur.

Rinse mouth thoroughly with water.

Most important symptoms Causes serious eye irritation

delayed and effects, both acute and

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

Carbon dioxide (CO2) Dry chemical

Unsuitable extinguishing High volume water jet

fighting Specific hazards during fire . . Do not use a solid water stream as it may scatter and spread

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

Exposure to combustion products may be a hazard to health

Hazardous combustion prod-. . 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

for fire-fighters Special protective equipment In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

emergency procedures protective equipment and Personal precautions, Use personal protective equipment. Remove all sources of ignition.

equipment recommendations. Follow safe handling advice and personal protective

Environmental precautions ٠. Discharge into the environment must be avoided

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barriers). Prevent spreading over a wide area (e.g. by containment or oil Prevent further leakage or spillage if safe to do so

Local authorities should be advised if significant spillages Retain and dispose of contaminated wash water.

cannot be contained.

containment and cleaning up Methods and materials for Non-sparking tools should be used. Soak up with inert absorbent material.

Suppress (knock down) gases/vapors/mists with a water spray

container. 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

absorbent. Clean up remaining materials from spill with suitable

determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding employed in the cleanup of releases. You will need to disposal of this material, as well as those materials and items certain local or national requirements Local or national regulations may apply to releases and

SECTION 7. HANDLING AND STORAGE

Technical measures See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Use with local exhaust ventilation.

ventilation. Use only in an area equipped with explosion proof exhaust Local/Total 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.

practice. Handle in accordance with good industrial hygiene and safety

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.

Do not store with the following product types: Strong oxidizing agents

Materials to avoid

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Organic peroxides
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures
Substances and mixtures which in contact with water emit flammable gases
Explosives

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of	Control	Daysis is
		(Form of	narameters /	
			CX. C. C. C. C.	
		exposure)	Permissible	
			concentration	
Ethanol	64-17-5	TWA	1,000 ppm	NIOSH REL
· · · · · · · · · · · · · · · · · · ·			1,900 mg/m3	
The state of the s		AWI	1,000 ppm	OSHA Z-1
			1,900 mg/m3	***************************************
The action of the second of th		STEL	1,000 ppm	ACGIH
Propan-2-ol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm	NIOSH REL
			980 mg/m3	
- Aller - Alle		ST	500 ppm	NIOSH REL
			1,225 mg/m3	
10000000 Common Com		TWA	400 ppm	OSHA Z-1
			980 mg/m3	

Biological occupational exposure limits

		2000				
		W/DDk				
		work-				
		end of				
B		shift at				
ACGIH	40 mg/l	End of	Urine	Acetone	67-63-0 Acetone	Propan-2-ol
	ח	time			1. 1.	
	concentratio	pling	specimen	parameters		
Basis	Permissible		Biological Sam-		CAS-No. Control	Ingredients
		1				

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

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

Hand protection

Material

. . Impervious gloves

Material ٠, Flame retardant gloves

Remarks . .

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! resistance to chemicals of the aforementioned protective For special applications, we recommend clarifying the

gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Wear the following personal protective equipment: Safety goggles

Eye protection

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)

located close to the working place. When using do not eat, drink or smoke Ensure that eye flushing systems and safety showers are

Wash contaminated clothing before re-use

Hygiene measures

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance gel

Color clear, light blue

Odor fruity

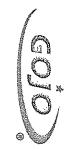
Odor Threshold No data available

오 3.5 - 8.5

Melting point/freezing point No data available

Initial boiling point and boiling 73

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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 0.881 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 1,000 - 17,000 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-Flammable liquid and vapor.

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

Conditions to avoid Heat, flames and sparks.

Incompatible materials Oxidizing agents

Hazardous decomposition . . No hazardous decomposition products are known.

products

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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

LC50 (Rat): 72.6 mg/l

Acute inhalation toxicity

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 irritation

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.

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

Application Route: Ingestion Species: Mouse

Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Genotoxicity in vivo

Result: negative

Genotoxicity in vitro Propan-2-ol:

Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo

Test Type: Mammalian erythrocyte micronucleus test (in vivo

Species: Mouse cytogenetic assay)

Application Route: Intraperitoneal injection

Result: negative

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Carcinogenicity

Not classified based on available information.

Ingredients:

Propan-2-ol:

Application Route: inhalation (vapor) Species: Rat

Exposure time: 104 weeks Method: OECD Test Guideline 451

Result: negative

ARC 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 carcinogen by OSHA.

Z, 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

Species: Rat
Application Route: Ingestion Test Type: Embryo-fetal development

Effects on fetal development

Result: negative

STOT-single exposure

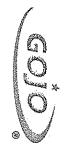
Not classified based on available information.

ngredients:

Propan-2-ol:

Assessment: May cause drowsiness or dizziness

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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 promelas (fathead minnow)): > 1,000 mg/l Exposure time: 96 h

aquatic invertebrates Toxicity to daphnia and other . . 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

- • NOEC (Daphnia magna (Water flea)): 9.6 mg/l Exposure time: 9 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Toxicity to bacteria EC50 (Photobacterium phosphoreum): 32.1 mg/l Exposure time: 0.25 h

Propan-2-ol: Toxicity to fish

LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l Exposure time: 96 h

aquatic invertebrates Toxicity to daphnia and other EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 24 h

Toxicity to algae mg/l ErC50 (Scenedesmus quadricauda (Green algae)): > 1,800

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Exposure time: 0 Ω.

Toxicity to bacteria EC50 (Pseudomonas putida): > 1,050 mg/l Exposure time: 16 h

Persistence and degradability

Ingredients:

Ethanol: Biodegradability Result: Readily blodegradable. Biodegradation: 84 % Exposure time: 20 d

Propan-2-ol:

Biodegradability Result: rapidly degradable

Bloaccumulative potential

Ingredients:

Ethanol:
Partition coefficient: nlog Pow: -0.35

octanol/water

Partition coefficient: n-octanol/water Propan-2-ol: log Pow: 0.05

No data available

Mobility in soil

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

Proper shipping name ALCOHOLS, N.O.S UN 1987

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(Ethanol, Propan-2-ol)

Packing group Class **≡** ω

Labels

Proper shipping name UN/ID No. IATA-DGR UN 1987 Alcohols, n.o.s.

Class (Ethanol, Propan-2-ol)

Packing group

Packing instruction (cargo Labels 366 8 Flammable Liquids

aircraft) Packing instruction 355

(passenger aircraft)

UN number IMIDG-Code

Proper shipping name UN 1987 ALCOHOLS, N.O.S.

(Ethanol, Propan-2-ol)

Packing group Class Labels

EmS Code 3 F-E, S-D

Marine pollutant

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

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number UN 1987

Proper shipping name ALCOHOLS, N.O.S.

Class

Packing group =

ERG Code Labels 127 FLAMMABLE LIQUID

Marine pollutant 2

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 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

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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:

Propan-2-ol

67-63-0

3.4086 %

US State Regulations

Pennsylvania Right To Know

New Jersey Right To Know Water Water Ethanol Propan-2-ol Ethanol 64-17-5 67-63-0 67-63-0 64-17-5 7732-18-5 7732-18-5 30 - 50 % 50 - 70 % 30 - 50 % 50 - 70 % 1-5% 1-5%

Propan-2-ol

California Prop 65

State of California to cause cancer, birth, or any other reproductive defects. This product does not contain any chemicals known to the

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

REACH All ingredients (pre-)registered or exempt.

TSCA

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical

Substances.

DSL All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the

Canadian Domestic Substances List (DSL).

All ingredients listed or exempt

AICS

Inventories

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

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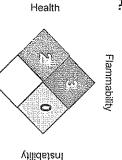
> MSDS Number 36762-00002

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SECTION 16. OTHER INFORMATION

Further information

NEDA:



0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic

Special hazard

Full text of other abbreviations

NIOSH REL ACGIH BEI ACGIH USA. ACGIH Threshold Limit Values (TLV)
ACGIH - Biological Exposure Indices (BEI)
USA. NIOSH Recommended Exposure Limits

OSHA Z-1 USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

ACGIH / STEL ACGIH / TWA Short-term exposure limit 8-hour, time-weighted average

NIOSH REL / TWA workday during a 40-hour workweek Time-weighted average concentration for up to a 10-hour

NIOSH REL / ST STEL - 15-minute TWA exposure that should not be exceeded

OSHA Z-1 / TWA 8-hour time weighted average at any time during a workday

Data Sheet compile the Material Safety Sources of key data used to eChem Portal search results and European Chemicals Agen-Internal technical data, data from raw material SDSs, OECD cy, http://echa.europa.eu/

Revision Date 02/10/2015

applicable 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 ance 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, unformation and belief at the date of its publication. The information is designed only as a guidless specified in the text. Material users should review the information and recommendations The information provided in this Safety Data Sheet is correct to the best of our knowledge, in-

US / Z8