

Version 1.3	Revision Date: 02/10/2015		SDS Number: 6432-00004		sue: 12/19/2014 ssue: 12/11/2014
SECTION	1. IDENTIFICATION				
Produ	uct name	:	PURELL® Advan	iced Green Cer	tified Instant Hand Sanitizer
Manu	afacturer or supplier's	deta	ails		
Com	pany name of supplier	:	GOJO Industries,	, Inc.	NYSID # D4070, D4071, D4072
Addre	ess	:	One GOJO Plaza Akron OH 44311	a, Suite 500	Marketed by: Liberty Enterprises 43 Liberty Drive
Telep	hone	:	1 (330) 255-6000	1	Amsterdam, NY 12010 (518) 954-3002
Emer	gency telephone	:	1-800-424-9300	CHEMTREC	
Reco	mmended use of the o	chen	nical and restriction	ons on use	
Reco	mmended use	:	Hand Sanitizer		
Restr	ictions on use	:	consumers and o foreseeable use. specifically define exempt from the While this materia contains valuable proper use of the as well as unusua spills. This SDS s employees and o	ther users under Cosmetics and ed by regulation requirement of al is not conside information cri product for ind al and unintend should be retain ther users of th dance, please r	etic product that is safe for er normal and reasonably consumer products, as around the world, are an SDS for the consumer. ered hazardous, this SDS tical to the safe handling and ustrial workplace conditions ed exposures such as large and available for is product. For specific efer to the information uction 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.



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	H319 Causes s	erious eye irritation.
Precautionary Statements	No smoking. P233 Keep coni P241 Use explo equipment. P242 Use only i P243 Take prec P264 Wash skir P280 Wear prot Response: P303 + P361 + all contaminated P305 + P351 + for several minu to do. Continue P337 + P313 If attention. Storage: P403 + P235 St Disposal:	ay from heat/sparks/open flames/hot surfaces tainer tightly closed. osion-proof electrical/ ventilating/ lighting/ non-sparking tools. cautionary measures against static discharge. In thoroughly after handling. tective gloves/ eye protection/ face protection. P353 IF ON SKIN (or hair): Take off immediately d clothing. Rinse skin with water/shower. P338 IF IN EYES: Rinse cautiously with water utes. Remove contact lenses, if present and easy rinsing. eye irritation persists: Get medical advice/ tore in a well-ventilated place. Keep cool.

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 me advice immediately. When symptoms persist or in all cases of doubt see 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.	



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In c	case of eye contact	for at least 15	remove contact lens, if worn.			
If swallowed		Get medical a	: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.			
and	st important symptoms I effects, both acute and ayed	: Causes seriou	us eye irritation.			
Pro	tection of first-aiders	and use the re	onders should pay attention to self-protection, ecommended personal protective equipment ential for exposure exists.			
Not	tes to physician	: Treat symptor	natically 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	:	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- ucts	:	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 so. 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, : Remove all sources of ignition.



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	tective equipment and ergency procedures	Follow safe ha	protective equipment. andling advice and personal protective commendations.
En	vironmental precautions	Prevent furthe Prevent sprea barriers). Retain and dis	o the environment must be avoided. er leakage or spillage if safe to do so. Iding over a wide area (e.g. by containment or oil spose of contaminated wash water. les should be advised if significant spillages Itained.
	hods and materials for tainment and cleaning up	Soak up with Suppress (kno jet. For large spill containment to can be pumpe container. Clean up rem absorbent. Local or natio disposal of thi employed in the determine wh Sections 13 a	tools should be used. inert absorbent material. ock down) gases/vapors/mists with a water spray s, provide diking or other appropriate o keep material from spreading. If diked material ed, store recovered material in appropriate aining materials from spill with suitable nal regulations may apply to releases and s material, as well as those materials and items ne cleanup of releases. You will need to ich regulations are applicable. nd 15 of this SDS provide information regarding r 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.



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		Store in accordar	vell-ventilated place. nce with the particular national regulations. heat and sources of ignition.
Materi	als to avoid	Strong oxidizing a Organic peroxide Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating subs	es s s stances and mixtures mixtures which in contact with water emit

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Ingredients with workplace control parameters

Biological occupational exposure limits

Ingredients	CAS-No.	Control	Biological	Sam-	Permissible	Basis
3		parameters	specimen	pling	concentratio	
		•		time	n	
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.



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Pers	onal protective equipn	nent		
Resp	iratory protection	:	maintain vapor ex concentrations ar unknown, approp Follow OSHA res use NIOSH/MSH/ by air purifying res hazardous chemic supplied respirato release, exposure	e exhaust ventilation is recommended to posures below recommended limits. Where e above recommended limits or are riate respiratory protection should be worn. pirator regulations (29 CFR 1910.134) and A approved respirators. Protection provided spirators against exposure to any cal is limited. Use a positive pressure air or if there is any potential for uncontrolled e levels are unknown, or any other ere air purifying respirators may not provide on.
	l protection aterial	:	Impervious gloves	6
Ma	aterial	:	Flame retardant g	loves
Re	emarks	:	on the concentrat time is not determ For special applic resistance to cher	protect hands against chemicals depending ion specific to place of work. Breakthrough nined for the product. Change gloves often! ations, we recommend clarifying the micals of the aforementioned protective ove manufacturer. Wash hands before end of workday.
Еуе р	protection	:	Wear the following Safety goggles	g personal protective equipment:
Skin	and body protection	:	resistance data an potential. Wear the following Flame retardant a Skin contact must	e protective clothing based on chemical nd an assessment of the local exposure g personal protective equipment: intistatic protective clothing. t be avoided by using impervious protective aprons, boots, etc).
Hygie	ene measures	:	located close to the When using do not	ushing systems and safety showers are ne working place. ot eat, drink or smoke. ed clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: clear
Odor	: alcohol-like



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	Odor T	hreshold	:	No data available	
	рН		:	6.5 - 8.5	
	Melting	point/freezing point	:	No data available	
	Initial b range	oiling point and boiling	:	No data available	
	Flash p	oint	:	24 °C	
	Evapor	ation rate	:	No data available	
	Flamma	ability (solid, gas)	:	Not applicable	
	Upper e	explosion limit	:	No data available	
	Lower e	explosion limit	:	No data available	
	Vapor p	pressure	:	No data available	
	Relative	e vapor density	:	No data available	
	Density	,	:	0.88 g/cm3	
	Solubili Wate	ty(ies) er solubility	:	soluble	
	Partition octanol	n coefficient: n- /water	:	Not applicable	
	Autoign	ition temperature	:	No data available	
	Decom	position temperature	:	The substance or	mixture is not classified self-reactive.
	Viscosi [.] Visco	ty osity, kinematic	:	6,000 - 17,000 m	m2/s (20 °C)
	Explosi	ve properties	:	Not explosive	
	Oxidizir	ng 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 react with strong oxidizing agents.



ersion 3	Revision Date: 02/10/2015	MSDS Number: 36432-00004	Date of last issue: 12/19/2014 Date of first issue: 12/11/2014
Condi	itions to avoid	: Heat, flames a	and sparks.
Incom	patible materials	: Oxidizing age	nts
Hazaı produ	rdous decomposition cts	: No hazardous	decomposition products are known.
ECTION	11. TOXICOLOGICAL	INFORMATION	
Inhala Skin o Inges	contact	es of exposure	
	e toxicity		
	assified based on ava	lable information.	
<u>Produ</u> Acute	oral toxicity	: Acute toxicity e Method: Calcu	estimate: > 5,000 mg/kg lation method
Ethar Acute	dients: nol: oral toxicity inhalation toxicity	: LD50 (Rat): > : LC50 (Rat): 12	
	,	Exposure time Test atmosphe	: 4 h
	an-2-ol: oral toxicity	: LD50 (Rat): >	5,000 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): 72 Exposure time Test atmosphe	: 4 h
Acute	dermal toxicity	: LD50 (Rat): >	5,000 mg/kg
	corrosion/irritation assified based on ava	lable information.	
Produ	<u>uct:</u>		
	t: No skin irritation		
Ethar	dients: iol: es: Rabbit		

Method: OECD Test Guideline 404 Result: No skin irritation



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Propan-2-ol:

Species: Rabbit Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:

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 Result: negative



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	Propa Genoto	n-2-ol: oxicity in vitro	:	Test Type: Bacter Result: negative	ial reverse mutation assay (AMES)
	Genoto	oxicity in vivo	:	cytogenetic assay Species: Mouse	nalian erythrocyte micronucleus test (in vivo /) : Intraperitoneal injection
		ogenicity ssified based on availa	ble	information.	
	Exposu Method	n-2-ol:			
	IARC		e		product present at levels greater than or ntified as probable, possible or confirmed y IARC.
	OSHA		e		product present at levels greater than or ntified as a carcinogen or potential carcino-
	NTP		e		product present at levels greater than or ntified as a known or anticipated carcinogen
	-	ductive toxicity ssified based on availa	ble	information.	
	Ingred				
	Ethand Effects	ol: on fertility	:	Test Type: Two-g Species: Mouse Application Route Method: OECD To Result: negative	
	Propa Effects	n-2-ol: on fertility	:	Test Type: Two-g Species: Rat Application Route Result: negative	eneration reproduction toxicity study : Ingestion
	Effects	on fetal development	:	Test Type: Embry Species: Rat Application Route	ro-fetal development : Ingestion



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Result: negative

STOT-single exposure

Not classified based on available information.

Ingredients:

Propan-2-ol:

Assessment: May cause drowsiness or dizziness.

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
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



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Toxic	ity to bacteria	:	EC50 (Photoba Exposure time:	icterium phosphoreum): 32.1 mg/l 0.25 h
Propa	an-2-ol:			
Toxic	ity to fish	:	LC50 (Pimepha Exposure time:	ales promelas (fathead minnow)): 10,000 mg/ 96 h
	ity to daphnia and other tic invertebrates	:	EC50 (Daphnia Exposure time:	magna (Water flea)): > 10,000 mg/l 24 h
Toxic	ity to algae	:	ErC50 (Scened mg/l Exposure time:	lesmus quadricauda (Green algae)): > 1,800 8 d
Toxic	ity to bacteria	:	EC50 (Pseudo Exposure time:	nonas putida): > 1,050 mg/l 16 h
Persi	stence and degradabil	ity		
Ingre	dients:			
Ethar Biode	nol: gradability	:	Result: Readily Biodegradation Exposure time:	: 84 %
	an-2-ol: egradability	:	Result: rapidly	degradable
Bioad	ccumulative potential			
Ingre	dients:			
	nol: ion coefficient: n- ol/water	:	log Pow: -0.35	
Partiti	an-2-ol: ion coefficient: n- ol/water	:	log Pow: 0.05	
Mobi	lity in soil			
	ata available			
Othe	r adverse effects			
NI. 1.	ata available			

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Dispose of in accordance with local regulations.
Contaminated packaging	: Dispose of as unused product.



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		Empty containe	ers should be taken to an approved was

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	•	UN 1987 ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)
Class	:	3
Packing group Labels		III 3
IATA-DGR		
UN/ID No.	:	UN 1987
Proper shipping name	:	Alcohols, n.o.s. (Ethanol, Propan-2-ol)
Class	:	3
Packing group	:	111
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366
Packing instruction (passenger aircraft)	:	355
IMDG-Code		
UN number	:	UN 1987
Proper shipping name	:	ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)
Class	:	3
Packing group	:	
Labels EmS Code	÷	3 F-E, S-D
Marine pollutant	:	no
Transport in bulk according	to	Annex II of MARPOL 73/78 a

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 Proper shipping name	: UN 1987 : ALCOHOLS, N.O.S.
Class	: 3
Packing group	: III
Labels	: FLAMMABLE LIQUID
ERG Code	: 127



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Marine pollutant		: 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 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 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				
-	Ethanol		64-17-5	50 - 70 %
	Water		7732-18-5	30 - 50 %
	Propan-2-ol		67-63-0	1 - 5 %
New Jersey Right To Know				
-	Ethanol		64-17-5	50 - 70 %
	Water		7732-18-5	30 - 50 %
	Propan-2-ol		67-63-0	1 - 5 %
California Prop 65		This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.		

The ingredients of this product are reported in the following inventories:AICS: All ingredients listed or exempt.

Inventories

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



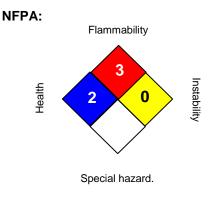
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SECTION 16. OTHER INFORMATION

Further information



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

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

Full text of other abbreviations			
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)	
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)	
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits	
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants	
ACGIH / TWA	:	8-hour, time-weighted average	
ACGIH / STEL	:	Short-term exposure limit	
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek	
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday	
OSHA Z-1 / TWA	:	8-hour time weighted average	
Sources of key data used to compile the Material Safety Data Sheet	:	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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