SAFETY DATA SHEETS

This SDS packet was issued with item: 071276443

N/A



Version 1.3	Revision Date: 02/10/2015		SDS Number: 432-00004	Date of last issue: 12/19/2014 Date of first issue: 12/11/2014
SECTION	1. IDENTIFICATION			
Produ	ct name	:	PURELL® Advan	ced Hand Sanitizer Green Certified Gel
Manut	facturer or supplier's	deta	ails	
Comp	any name of supplier	:	GOJO Industries,	Inc.
Addre	SS	:	One GOJO Plaza Akron OH 44311	, Suite 500
Telepł	none	:	1 (330) 255-6000	
Emerg	ency telephone	:	1-800-424-9300	CHEMTREC
Recor	nmended use of the c	hen	nical and restriction	ons on use
Recon	nmended use	:	Hand Sanitizer	
Restrie	ctions on use	:	consumers and o foreseeable use. specifically define exempt from the r While this materia contains valuable proper use of the as well as unusua spills. This SDS s employees and of intended-use guid	I care or cosmetic product that is safe for ther users under normal and reasonably Cosmetics and consumer products, ad by regulations around the world, are requirement of an SDS for the consumer. al is not considered hazardous, this SDS information critical to the safe handling and product for industrial workplace conditions al and unintended exposures such as large hould be retained and available for ther users of this product. For specific lance, please refer to the information ackage 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.



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		H319 Causes se	erious eye irritation.
Preca	utionary Statements	No smoking. P233 Keep cont P241 Use explo equipment. P242 Use only r 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:	y from heat/sparks/open flames/hot surfaces ainer tightly closed. sion-proof electrical/ ventilating/ lighting/ non-sparking tools. autionary measures against static discharge. h thoroughly after handling. ective 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 tes. Remove contact lenses, if present and easy rinsing. eye irritation persists: Get medical advice/ ore in a well-ventilated place. Keep cool. f 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 medica advice immediately. When symptoms persist or in all cases of doubt seek me 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 case of eye contact		for at least 15 If easy to do,	 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. Get medical attention. 			
If swallowed		Get medical a	 If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water. 			
Most important symptoms and effects, both acute and delayed		: Causes serio	us eye irritation.			
Pr	otection of first-aiders	and use the re	onders should pay attention to self-protection, ecommended personal protective equipment ential for exposure exists.			
No	tes to physician	: Treat symptor	matically 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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•	ective equipment and rgency procedures	Follow safe ha	protective equipment. ndling advice and personal protective pmmendations.
Envi	ronmental precautions	Prevent further Prevent spread barriers). Retain and dis	the environment must be avoided. leakage or spillage if safe to do so. ling over a wide area (e.g. by containment or oil cose of contaminated wash water. es should be advised if significant spillages ained.
	ods and materials for ainment and cleaning up	Soak up with ir Suppress (kno jet. For large spills containment to can be pumper container. Clean up rema absorbent. Local or nation disposal of this employed in th determine whic Sections 13 an	ools should be used. hert absorbent material. ck down) gases/vapors/mists with a water spray , provide diking or other appropriate keep material from spreading. If diked material d, store recovered material in appropriate ining materials from spill with suitable al regulations may apply to releases and material, as well as those materials and items e cleanup of releases. You will need to ch regulations are applicable. d 15 of this SDS provide information regarding 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	rell-ventilated place. nce with the particular national regulations. heat and sources of ignition.
Materia	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 parameters	Biological specimen	Sam- pling	Permissible concentratio	Basis
		1		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 equipr	nent		
Resp	biratory 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.
	d protection aterial	:	Impervious gloves	6
M	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.
Eye	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).
Hygi	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 TI	nreshold	:	No data available		
	pН		:	6.5 - 8.5		
	Melting	point/freezing point	:	No data available		
	Initial bo range	oiling point and boiling	:	No data available		
	Flash p	oint	:	24 °C		
	Evapora	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	oressure	:	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 class	sified self-reactive.
	Viscosi Visco	ty osity, kinematic	:	6,000 - 17,000 mi	m2/s (20 °C)	
	Explosi	ve properties	:	Not explosive		
	Oxidizir	ng properties	:	The substance or	mixture is not class	sified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Not classified as a reactivity h	nazard.
Chemical stability	Stable under normal condition	ns.
Possibility of hazardous reac- tions	Flammable liquid and vapor. Vapors may form explosive n Can react with strong oxidizir	



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Condi	tions to avoid	: Heat, flames	and sparks.
Incom	patible materials	: Oxidizing ag	ents
Hazaı produ	dous decomposition	: No hazardou	is decomposition products are known.
ECTION	11. TOXICOLOGICAI	INFORMATION	
Inhala Skin o Inges	contact	es of exposure	
	e toxicity		
	assified based on ava	lable information.	
<u>Produ</u> Acute	<u>uct:</u> oral toxicity		estimate: > 5,000 mg/kg ulation method
Ethar Acute	dients: nol: oral toxicity inhalation toxicity	: LD50 (Rat): > : LC50 (Rat): 1 Exposure tim	24.7 mg/l
		Test atmosph	
	a n-2-ol: oral toxicity	: LD50 (Rat): >	• 5,000 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): 7 Exposure tim Test atmosph	e: 4 h
Acute	dermal toxicity	: LD50 (Rat): >	• 5,000 mg/kg
	corrosion/irritation assified based on ava	lable information.	
Produ	uct:		
	t: No skin irritation		
Ethar	dients: iol: es: Rabbit		

Species: 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:	: Test Type: In vitro mammalian cell gene mutation test
Genotoxicity in vitro	Result: negative
Genotoxicity in vivo	: Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Ingestion Result: negative



ersion .3	Revision Date: 02/10/2015		SDS Number: 432-00004	Date of last issue: 12/19/2014 Date of first issue: 12/11/2014
	pan-2-ol: notoxicity in vitro	:	Test Type: Bacter Result: negative	rial reverse mutation assay (AMES)
Gei	notoxicity in vivo	:	cytogenetic assay Species: Mouse	nalian erythrocyte micronucleus test (in vivo /) :: Intraperitoneal injection
	cinogenicity classified based on availa	able	information.	
Pro Spe App Exp Met	redients: pan-2-ol: ecies: Rat plication Route: inhalation posure time: 104 weeks thod: OECD Test Guidelin sult: negative			
IAF	3S	e		product present at levels greater than or ntified as probable, possible or confirmed y IARC.
os	HA	e		product present at levels greater than or ntified as a carcinogen or potential carcino-
NT	Ρ	e		product present at levels greater than or ntified as a known or anticipated carcinogen
	productive toxicity classified based on availa	able	information.	
Ing	redients:			
	anol: ects on fertility	:	Test Type: Two-g Species: Mouse Application Route Method: OECD T Result: negative	
	pan-2-ol: acts on fertility	:	Test Type: Two-g Species: Rat Application Route Result: negative	eneration reproduction toxicity study
Effe	ects on fetal development	:	Test Type: Embry Species: Rat Application Route	vo-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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Toxici	ity to bacteria	:	EC50 (Photoba Exposure time:	cterium phosphoreum): 32.1 mg/l 0.25 h
	a n-2-ol: ity to fish	:	LC50 (Pimepha Exposure time:	les promelas (fathead minnow)): 10,000 mg 96 h
	ity to daphnia and other ic invertebrates	:	EC50 (Daphnia Exposure time:	magna (Water flea)): > 10,000 mg/l 24 h
Toxici	ity to algae	:	ErC50 (Scened mg/l Exposure time:	esmus quadricauda (Green algae)): > 1,800 8 d
Toxici	ity to bacteria	:	EC50 (Pseudon 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 %
	a n-2-ol: gradability	:	Result: rapidly o	legradable
Bioac	cumulative potential			
Ingre	dients:			
	iol: on coefficient: n- ol/water	:	log Pow: -0.35	
Partiti	a n-2-ol: on coefficient: n- ol/water	:	log Pow: 0.05	
Mobil	lity in soil			
	ita available			
Other	adverse effects			
No da	ita 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 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

: UN 1987 : ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)
: 3 : III : 3
 : UN 1987 : Alcohols, n.o.s. (Ethanol, Propan-2-ol) : 3 : III : Flammable Liquids : 366 : 355
: UN 1987 : ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)
(Euranoi, Fropar-2-or) : 3 : III : 3 : F-E, S-D : no

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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Marin	e 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:		
		F	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)



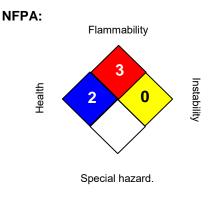
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SECTION 16. OTHER INFORMATION

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 ACGIH BEI NIOSH REL	:	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 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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