

Version 1.1	Revision Date: 02/10/2015		SDS Number: 6779-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014
SECTION	1. IDENTIFICATION			
Produ	ict name	:	PURELL® Advan	ced Hand Sanitizer Refreshing Gel
Manu	facturer or supplier's	deta	ails	
	pany name of supplier	:		Inc.
Addre	ess	:	One GOJO Plaza Akron OH 44311	, Suite 500
Telep	hone	:	1 (330) 255-6000	
Emer	gency telephone	:	1-800-424-9300	CHEMTREC
Reco	mmended use of the c	her	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 intended-use guid	I care or cosmetic product that is safe for ther users under normal and reasonably Cosmetics and consumer products, ed 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 should be retained and available for ther users of this product. For specific dance, 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	autionary 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 minut to do. Continue P337 + P313 If attention. Storage: P403 + P235 St Disposal:	y from heat/sparks/open flames/hot surfaces tainer tightly closed. sion-proof electrical/ ventilating/ lighting/ non-sparking tools. autionary measures against static discharge. 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 ttes. 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 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.	



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In ca	se of eye contact	for at least 15	remove contact lens, if worn.
lf swa	allowed	Get medical a	DO NOT induce vomiting. ttention if symptoms occur. horoughly with water.
	important symptoms effects, both acute and /ed	: Causes seriou	us eye irritation.
Prote	ection of first-aiders	and use the re	onders should pay attention to self-protection, ecommended personal protective equipment ential for exposure exists.
Note	s 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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	ective equipment and rgency procedures	Follow safe ha	protective equipment. andling advice and personal protective commendations.
Env	ronmental precautions	Prevent furthe Prevent sprea barriers). Retain and dis	o the environment must be avoided. In leakage or spillage if safe to do so. ding over a wide area (e.g. by containment or oil spose of contaminated wash water. es should be advised if significant spillages tained.
	nods and materials for ainment and cleaning up	Soak up with i Suppress (kno jet. For large spills containment to can be pumpe container. Clean up rema absorbent. Local or nation disposal of thi employed in th determine whi Sections 13 a	tools should be used. nert absorbent material. ock down) gases/vapors/mists with a water spray s, provide diking or other appropriate b keep material from spreading. If diked material ed, store recovered material in appropriate aining materials from spill with suitable hal regulations may apply to releases and s material, as well as those materials and items he cleanup of releases. You will need to ch regulations are applicable. Ind 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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	als to avoid	Keep in a cool, w Store in accordar Keep away from : Do not store with Strong oxidizing a Organic peroxide Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating subs	rell-ventilated place. nce with the particular national regulations. heat and sources of ignition. the following product types: agents s s s s s s s s s s s s s
		Gases	

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	sonal protective equipn	nent	
Res	piratory protection	maintain va concentratio unknown, a Follow OSH use NIOSH by air purify hazardous supplied res release, exp	d local exhaust ventilation is recommended to por exposures below recommended limits. Where ons are above recommended limits or are ppropriate respiratory protection should be worn. A respirator regulations (29 CFR 1910.134) and /MSHA approved respirators. Protection provided ring respirators against exposure to any chemical is limited. Use a positive pressure air spirator if there is any potential for uncontrolled posure levels are unknown, or any other ce where air purifying respirators may not provide rotection.
	d protection laterial	: Impervious	gloves
Μ	laterial	: Flame retar	dant gloves
R	emarks	on the cond time is not of For special resistance t gloves with	ves to protect hands against chemicals depending entration specific to place of work. Breakthrough determined for the product. Change gloves often! applications, we recommend clarifying the o chemicals of the aforementioned protective the glove manufacturer. Wash hands before at the end of workday.
Eye	protection	: Wear the fo Safety gogo	llowing personal protective equipment: gles
Skin	and body protection	resistance of potential. Wear the fo Flame retar Skin contac	opriate protective clothing based on chemical data and an assessment of the local exposure llowing personal protective equipment: dant antistatic protective clothing. et must be avoided by using impervious protective oves, aprons, boots, etc).
Hyg	iene measures	located close When using	eye flushing systems and safety showers are se to the working place. g do not eat, drink or smoke. aminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: clear, Colorless to pale yellow
Odor	: citrus



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	Odor Th	nreshold	:	No data available		
	pН		:	6.5 - 8.5		
	Melting	point/freezing point	:	No data available		
	Initial bo range	oiling point and boiling	:	70 °C		
	Flash p	oint	:	25 °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	pressure	:	No data available		
	Relative	e vapor density	:	No data available		
	Density		:	0.8750 g/cm3		
		er solubility	:	soluble		
	octanol	n coefficient: n- /water	:	Not applicable		
	Autoign	ition temperature	:	No data available		
	Decom	position temperature	:	The substance or	mixture is not clas	sified self-reactive.
	Viscosit Visco	ty osity, kinematic	:	3,500 - 23,000 m	m2/s (20 °C)	
	Explosi	ve properties	:	Not explosive		
	Oxidizir	ng properties	:	The substance or	mixture is not clas	sified 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.



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Condi	itions to avoid	: Heat, flames	and sparks.
Incom	npatible materials	: Oxidizing age	ents
Hazaı produ	rdous decomposition	: No hazardou	s decomposition products are known.
CTION	11. TOXICOLOGICAL	INFORMATION	
Inhala Skin o Inges	contact	s of exposure	
	e toxicity		
	assified based on avai	able information.	
<u>Produ</u> Acute	u <u>ct:</u> oral toxicity		estimate: > 5,000 mg/kg ulation method
Ethar Acute	dients: nol: oral toxicity inhalation toxicity	: LD50 (Rat): > : LC50 (Rat): 1 Exposure time	24.7 mg/l e: 4 h
Propa	an-2-ol:	Test atmosph	ere: vapor
	oral toxicity	: LD50 (Rat): >	5,000 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): 7 Exposure time Test atmosph	e: 4 h
Acute	e dermal toxicity	: LD50 (Rat): >	5,000 mg/kg
Not cl	corrosion/irritation assified based on avai	able information.	
<u>Produ</u> Resul	lt: No skin irritation		
Ethar	<u>dients:</u> 1 01: 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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	Propar Genoto	n-2-ol: exicity 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				
	Ethanc Effects	ol: on fertility	:	Test Type: Two-g Species: Mouse Application Route Method: OECD To Result: negative	
	Propar Effects	n-2-ol: on fertility	:	Test Type: Two-g Species: Rat Application Route Result: negative	eneration reproduction toxicity study
	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



ersion 1	Revision Date: 02/10/2015		SDS Number: 779-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014
Toxic	ity to bacteria	:	EC50 (Photoba Exposure time:	icterium phosphoreum): 32.1 mg/l 0.25 h
Propan-2-ol: Toxicity to fish		:	LC50 (Pimepha Exposure time:	ales promelas (fathead minnow)): 10,000 mg/ 96 h
	ity to daphnia and other ic invertebrates	:	EC50 (Daphnia Exposure time:	n magna (Water flea)): > 10,000 mg/l 24 h
Toxic	ity to algae	:	ErC50 (Scenec mg/l Exposure time:	lesmus quadricauda (Green algae)): > 1,800 8 d
Toxic	ity to bacteria	:	EC50 (Pseudor Exposure time:	nonas putida): > 1,050 mg/l 16 h
Persi	stence and degradabil	ity		
Ingre	dients:			
Ethar Biode	n ol: gradability	:	Result: Readily Biodegradation Exposure time:	: 84 %
	a n-2-ol: gradability	:	Result: rapidly	degradable
Bioad	cumulative 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			

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

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) 3 III 3 F-E, S-D no Annex II of MARPOL 73/78 ar

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 :		Hazard te 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:			
		Prop	ban-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		Stat	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)



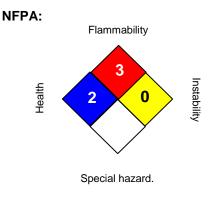
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SECTION 16. OTHER INFORMATION

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	:	Internal technical data, data from raw material SDSs, OECD	
compile the Material Safety		eChem Portal search results and European Chemicals Agen-	
Data Sheet		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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