

Version 1.1	Revision Date: 02/10/2015		SDS Number: 762-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014	
SECTION	1. IDENTIFICATION				
Prod	uct name	:	PURELL® Advar	nced Instant Hand Sanitizer	
Man	ufacturer or supplier's	deta	ails		
		:			
Addr	ess	:	One GOJO Plaza, Suite 500 Akron OH 44311		
Telep	phone	:	1 (330) 255-6000		
Eme	rgency telephone	:	1-800-424-9300	CHEMTREC	
Reco	ommended use of the o	chen	nical and restricti	ons on use	
Recommended use		:	Hand Sanitizer		
Rest	rictions on use	:	consumers and c foreseeable use. specifically define exempt from the While this materi contains valuable proper use of the as well as unusu spills. This SDS s employees and c intended-use gui	I care or cosmetic product that is safe for other 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 other users of this product. For specific dance, please refer to the information backage or instruction sheet.	

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Flammable liquids	: Ca	itegory 3
Eye irritation	: Ca	tegory 2A
GHS Label element Hazard pictograms	:	
Signal Word	: Wa	arning
Hazard Statements		26 Flammable liquid and vapor. 19 Causes serious eye irritation.



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Preca	utionary Statements	No smoking. P233 Keep conta P241 Use explose equipment. P242 Use only n P243 Take preca P264 Wash skin P280 Wear prote Response: P303 + P361 + F all contaminated P305 + P351 + F for several minut to do. Continue r P337 + P313 If e attention. Storage: P403 + P235 Sto Disposal:	y from heat/sparks/open flames/hot surfaces ainer tightly closed. sion-proof electrical/ ventilating/ lighting/ on-sparking tools. autionary measures against static discharge. thoroughly after handling. ective gloves/ eye protection/ face protection. 2353 IF ON SKIN (or hair): Take off immediately clothing. Rinse skin with water/shower. 2338 IF IN EYES: Rinse cautiously with water tes. Remove contact lenses, if present and easy insing. eye irritation persists: Get medical advice/ ore 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 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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If swallowed		 Get medical attention. 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	: Causes serious eye irritation.		
Protection of first-aiders		and use the r	onders should pay attention to self-protection, ecommended personal protective equipment ential for exposure exists.		
No	es to physician	: Treat sympto	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, 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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		Prevent spread barriers). Retain and disp	leakage or spillage if safe to do so. ing over a wide area (e.g. by containment or oil oose of contaminated wash water. s should be advised if significant spillages ained.
Methods and materials for containment and cleaning up		Soak up with in Suppress (knoc jet. For large spills, containment to can be pumped container. Clean up remai absorbent. Local or nationa disposal of this employed in the determine whic Sections 13 and	bols should be used. ert absorbent material. ek down) gases/vapors/mists with a water spray provide diking or other appropriate keep material from spreading. If diked material store recovered material in appropriate ning 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 h 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. 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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			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 time	Permissible concentratio n	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



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		by ha su re ci	y air purifying res azardous chemic upplied respirato elease, exposure	A approved respirators. Protection provided spirators against exposure to any cal is limited. Use a positive pressure air r if there is any potential for uncontrolled e levels are unknown, or any other ere air purifying respirators may not provide on.
	protection terial	: In	npervious gloves	3
Ma	terial	: FI	lame retardant g	loves
Re	marks	or tir Fe gl	n the concentration me is not determ or special applic esistance to cher oves with the glo	protect hands against chemicals depending ion specific to place of work. Breakthrough ined for the product. Change gloves often! ations, we recommend clarifying the nicals of the aforementioned protective ove manufacturer. Wash hands before end of workday.
Eye p	protection		/ear the following afety goggles	g personal protective equipment:
Skin a	and body protection	re po W Fl S	esistance data ar otential. /ear the following lame retardant a kin contact must	e protective clothing based on chemical nd an assessment of the local exposure g personal protective equipment: ntistatic protective clothing. be avoided by using impervious protective aprons, boots, etc).
Hygie	ne measures	lo W	cated close to th /hen using do no	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	:	gel
Color	:	clear, light blue
Odor	:	fruity
Odor Threshold	:	No data available
рН	:	6.5 - 8.5
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	73 °C



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Flas	h point	: 25 °C	
Eva	poration rate	: No data available	
Flam	nmability (solid, gas)	: Not applicable	
Upp	er explosion limit	: No data available	
Low	er explosion limit	: No data available	
Vap	or pressure	: No data available	
Rela	tive vapor density	: No data available	
Den	sity	: 0.881 g/cm3	
	bility(ies) /ater solubility	: soluble	
	ition coefficient: n- nol/water	: Not applicable	
Auto	ignition temperature	: No data available	
Dec	omposition temperature	: The substance or mixture is not classified self-reactive.	
	osity iscosity, kinematic	: 1,000 - 17,000 mm2/s (20 °C)	
Expl	osive properties	: Not explosive	
Oxid	lizing 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.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.



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Inhal Skin Inges	contact	es of exposure	
	e toxicity classified based on ava	ilable information	
Prod			
	e oral toxicity		estimate: > 5,000 mg/kg ulation method
Ingre	edients:		
Etha			
Acute	e oral toxicity	: LD50 (Rat): >	• 5,000 mg/kg
Acute	e inhalation toxicity	: LC50 (Rat): 1 Exposure tim Test atmosph	e: 4 h
Prop	an-2-ol:		
	e oral toxicity	: LD50 (Rat): >	• 5,000 mg/kg
Acute	e inhalation toxicity	: LC50 (Rat): 7 Exposure tim Test atmosph	e: 4 h
Acute	e dermal toxicity	: LD50 (Rat): >	• 5,000 mg/kg
•	corrosion/irritation		
Not c	lassified based on ava	ilable information.	
Prod	uct:		

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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Resu	eies: Rabbit	eversing 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
Propan-2-ol: 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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	ogenicity Issified based on availa	ıble	information.	
Exposi Method	n-2-ol:		,	
IARC		е		product present at levels greater than or ntified as probable, possible or confirmed by IARC.
OSHA		е		product present at levels greater than or ntified as a carcinogen or potential carcino-
NTP		е		product present at levels greater than or ntified as a known or anticipated carcinogen
-	ductive toxicity Issified based on availa	ıble	information.	
Ingred				
Ethand Effects	ol: on fertility	:	Species: Mouse Application Route	generation reproduction toxicity study e: Ingestion fest Guideline 416
Propa	n-2-ol:			
	on fertility	:	Test Type: Two-g Species: Rat Application Route Result: negative	eneration reproduction toxicity study e: Ingestion
Effects	on fetal development	:	Test Type: Embry Species: Rat Application Route Result: negative	yo-fetal development e: Ingestion
	single exposure ssified based on availa	ıble	information.	
Ingred				

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
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
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
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



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		Exposure time:	3 d
Toxicity to bacteria : EC50 (Pseudomon Exposure time: 16 I		nonas putida): > 1,050 mg/l 16 h	
Persi	stence and degrada	bility	
Ingre	dients:		
Ethar Biode	nol: gradability	: Result: Readily Biodegradation: Exposure time: 2	84 %
	a n-2-ol: gradability	: Result: rapidly d	egradable
Bioac	cumulative potentia	ıl	
Ingre	dients:		
	iol: ion coefficient: n- ol/water	: log Pow: -0.35	
Partiti	an-2-ol: on coefficient: n- ol/water	: log Pow: 0.05	
Mobil	lity in soil		
No da	ata available		
Other	r adverse effects		
No da	ata available		

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	: ALCOHOLS, N.O.S.



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Class Packing group Labels		(Ethanol, Propan-2-ol) : 3 : III : 3	
Class Packin Labels Packin aircrafi Packin	No. shipping name g group g instruction (cargo	 UN 1987 Alcohols, n.o.s. (Ethanol, Propan-2-ol) 3 III Flammable Liquids 366 355 	
Class Packin Labels EmS C Marine	mber shipping name g group Code e pollutant	 UN 1987 ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol) 3 III 3 F-E, S-D no g to Annex II of MARPOL 73/78 and the IBC Code 	
-	port in bulk accordin plicable for product as	-	

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
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

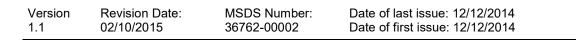


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				Acute Health Haz	ard			
8	SARA 302		:		nis material are subject to th ARA Title III, Section 302.	e reporting		
S	SARA 313		:	The following components are subject to reporting levels established by SARA Title III, Section 313:				
				Propan-2-ol	67-63-0	3.4086 %		
ι	JS State Regu	lations						
٩	Pennsylvania F New Jersey Rig California Prop	Ethanol Water Propan-2-ol ght To Know Ethanol Water Propan-2-ol	V		64-17-5 7732-18-5 67-63-0 64-17-5 7732-18-5 67-63-0 s not contain any chemicals a to cause cancer, birth, or a cts.			
I	The ingredient	s of this prod		•	e following inventories:			
F	REACH		:	All ingredients (pr	e-)registered or exempt.			
Т	ISCA		:		tances in this material are in ting on the TSCA Inventory			
C	DSL		:	1999 and NSNR a	tances in this product compl and are on or exempt from li tic Substances List (DSL).	y with the CEPA sting on the		
A	AICS		:	All ingredients list	ed 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)





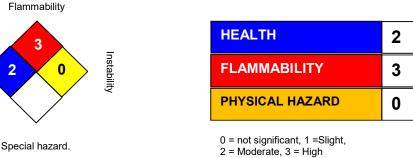
SECTION 16. OTHER INFORMATION

Further information



Health

HMIS III:



4 = Extreme, * = Chronic

Full text of other abbreviations

ACGIH ACGIH BEI		USA. ACGIH Threshold Limit Values (TLV) 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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