

Version 1.1	Revision Date: 02/10/2015	MSDS Num 36779-0000				
SECTION	1. IDENTIFICATION					
Produ	ict name	: PUREL	: PURELL® Advanced Instant Hand Sanitizer			
Manu	facturer or supplier's	details				
Addre	ess		One GOJO Plaza, Suite 500 Akron OH 44311			
Telep	hone	: 1 (330)	1 (330) 255-6000			
Emer	gency telephone	: 1-800-4	1-800-424-9300 CHEMTREC			
Reco	mmended use of the o	hemical and	restrictions on use			
Reco	mmended use	: Hand S	: Hand Sanitizer			
Restrictions on use		consum foresee specific exempt While th contains proper of as well spills. T employe intende	a personal care or cosmetic product that is safe for hers and other users under normal and reasonably vable use. Cosmetics and consumer products, cally defined by regulations around the world, are from the requirement of an SDS for the consumer. his material is not considered hazardous, this SDS s valuable information critical to the safe handling and use of the product for industrial workplace conditions as unusual and unintended exposures such as large this SDS should be retained and available for ees and other users of this product. For specific d-use guidance, please refer to the information d 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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Preca	utionary Statements	No smoking. P233 Keep conta P241 Use explose equipment. P242 Use only n P243 Take preca P264 Wash skin P280 Wear prota Response: P303 + P361 + F all contaminated P305 + P351 + F for several minut to do. Continue of P337 + P313 If e attention. Storage: P403 + P235 Sta 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. thoroughly after handling. ective gloves/ eye protection/ face protection. P353 IF ON SKIN (or hair): Take off immediately 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 medical advice immediately. When symptoms persist or in all cases of doubt seek medi- advice.	cal
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 wa for at least 15 minutes. If easy to do, remove contact lens, if worn.	ater



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lf sv	vallowed	Get medical a	ttention. DO NOT induce vomiting. ttention if symptoms occur. horoughly with water.	
Most important symptoms and effects, both acute and delayed		: Causes serious eye irritation.		
Protection of first-aiders		and use the re	onders should pay attention to self-protection, ecommended personal protective equipment ential for exposure exists.	
Not	es 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 a fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to	
Hazardous combustion prod- ucts	Carbon oxides	
Specific extinguishing methods	Use extinguishing measures that are appropriate to loc circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is sa so. Evacuate area.	
Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing appa Use personal protective equipment.	aratus.

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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Methods and materials for	Prevent spread barriers). Retain and disp Local authorities cannot be conta	ools should be used.
containment and cleaning u	 Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water sprajet. 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 container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. 	

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 exh ventilation.	naust
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 practice. Non-sparking tools should be used. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharge Take care to prevent spills, waste and minimize releas environment.	es.
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 regula Keep away from heat and sources of ignition.	itions.
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

<u> </u>	•			
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 air purifying re- hazardous chemic supplied respirato release, 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.		
Hand protection Material			:	: Impervious gloves			
Material		:	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! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.				
E	ye pro	otection	:	Wear the following Safety goggles	g personal protective equipment:		
S	ŝkin ar	nd 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. be avoided by using impervious protective aprons, boots, etc).		
Н	lygien	e 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, Colorless to pale yellow	
Odor	: citrus	
Odor Threshold	: No data available	
рН	: 6.5 - 8.5	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: 70 °C	



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	Flash p	oint	:	25 °C			
	Evaporation rate		: No data available				
	Flammability (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 vapor density		:	No data available)		
	Density		:	0.8750 g/cm3			
	Solubili Wate	ty(ies) er solubility	:	soluble			
	Partition coefficient: n- octanol/water		:	Not applicable			
	Autoignition temperature		:	No data available)		
	Decomposition temperature		:	The substance or	r mixture is not clas	sified self-reactive.	
	Viscosi Visco	ty osity, kinematic	:	3,500 - 23,000 m	m2/s (20 °C)		
	Explosi	ve properties	:	Not explosive			
	Oxidizing properties		:	The substance or	r 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.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.



rsion	Revision Date: 02/10/2015	MSDS Number: 36779-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014
CTION	11. TOXICOLOGICA	L INFORMATION	
Inhala Skin o Inges	contact	es of exposure	
Acute	e toxicity		
Not cl	assified based on ava	ilable information.	
<u>Produ</u> Acute	u <u>ct:</u> oral toxicity		estimate: > 5,000 mg/kg ulation method
Ingre	dients:		
Ethar			
Acute	oral toxicity	: LD50 (Rat): >	5,000 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): 1 Exposure tim Test atmosph	e: 4 h
	an-2-ol:		
Acute	oral toxicity	: LD50 (Rat): >	5,000 mg/kg
Acute	inhalation toxicity	: LC50 (Rat): 7 Exposure tim Test atmosph	e: 4 h
Acute	e dermal toxicity	: LD50 (Rat): >	5,000 mg/kg
Skin	corrosion/irritation		
Not cl	assified based on ava	ilable information.	
<u>Produ</u>	uct:		
Resul	t: No skin irritation		

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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Resul	nol: es: Rabbit t: Irritation to eyes, re od: OECD Test Guide		S
Speci	an-2-ol: es: Rabbit t: Irritation to eyes, re	versing within 21 day	s
Resp	iratory or skin sensi	tization	
	sensitization: Not clas ratory sensitization: N		able information. n available information.
Produ	uct:		
	ssment: Does not cau	se skin sensitization.	
Ethar Test T Route Speci	dients: nol: Type: Local lymph nod s of exposure: Skin c es: Mouse t: negative		
Test T Route Speci Metho	an-2-ol: Type: Buehler Test s of exposure: Skin o es: Guinea pig od: OECD Test Guide t: negative		
Germ	cell mutagenicity		
Not cl	assified based on ava	ailable information.	
-	dients:		
Ethar Geno	tol: toxicity in vitro	: Test Type: In Result: negati	vitro mammalian cell gene mutation test ive
Geno	toxicity in vivo	Species: Mou	oute: Ingestion
Propa	an-2-ol:		
	toxicity in vitro	: Test Type: Ba Result: negati	acterial reverse mutation assay (AMES) ive
Geno	toxicity in vivo	cytogenetic as Species: Mou	se oute: Intraperitoneal injection

Result: negative



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	nogenicity assified based on availa	ble information.		
Propa Speci Applic Expos Metho	dients: an-2-ol: es: Rat cation Route: inhalation (sure time: 104 weeks od: OECD Test Guideline t: negative	/		
IARC	;		his product present at levels greater than or dentified as probable, possible or confirmed n by IARC.	
OSH	A	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcin gen by OSHA.		
NTP		No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinoge by NTP.		
Donr	oductive toxicity			
Not cl	assified based on availa	ble information.		
Not cl Ingre Ethar	assified based on availa dients:	: Test Type: Two Species: Mous Application Ro	ute: Ingestion) Test Guideline 416	
Not cl Ingre Ethar Effect	assified based on availa dients: nol:	: Test Type: Two Species: Mous Application Ro Method: OECE Result: negativ	e ute: Ingestion) Test Guideline 416 re p-generation reproduction toxicity study ute: Ingestion	
Not cl Ingre Ethar Effect Propa	assified based on availa dients: nol: is on fertility an-2-ol:	 Test Type: Two Species: Mous Application Ro Method: OECE Result: negativ Test Type: Two Species: Rat Application Ro Result: negativ 	e ute: Ingestion D Test Guideline 416 re o-generation reproduction toxicity study ute: Ingestion re bryo-fetal development ute: Ingestion	
Not cl Ingre Ethar Effect Propa Effect Effect	assified based on availa dients: nol: s on fertility an-2-ol: s on fertility	 Test Type: Two Species: Mous Application Ro Method: OECE Result: negativ Test Type: Two Species: Rat Application Ro Result: negativ Test Type: Em Species: Rat Application Ro Result: negativ 	e ute: Ingestion D Test Guideline 416 re o-generation reproduction toxicity study ute: Ingestion re bryo-fetal development ute: Ingestion	

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 tim	e: 8 d			
Toxic	ity to bacteria	: EC50 (Pseudomonas putida): > 1,050 mg/l Exposure time: 16 h				
Persi	stence and degrada	bility				
	dients:					
Ethar Biode	n ol: egradability	: Result: Read Biodegradatio Exposure tim				
•	an-2-ol: gradability	: Result: rapidly degradable				
Bioad	cumulative potentia	al				
Ingre	dients:					
	nol: ion coefficient: n- ol/water	: log Pow: -0.3	5			
Partiti	an-2-ol: ion coefficient: n- ol/water	: log Pow: 0.05	5			
Mobi	lity in soil					
No da	ata available					
	r adverse effects 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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Labe IAT UN/I Prop Clas Pacl Labe Pacl aircr	king group els A-DGR D No. ber shipping name s king group els king instruction (cargo	 (Ethanol, Propan-2-ol) 3 III 3 UN 1987 Alcohols, n.o.s. (Ethanol, Propan-2-ol) 3 III Flammable Liquids 366 355 			
(pas IMD UN I Prop Clas Pacl Labe EmS	senger aircraft) G-Code number per shipping name s sking group	: UN 1987 : ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol) : 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 C UN/I	-	: UN 1987 : ALCOHOLS, N.O.S.			
Clas Pacl Labe	king group	: 3 : III : FLAMMABLE LIQUID			

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

: 127

: no

CERCLA Reportable Quantity

ERG Code

Marine pollutant

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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		A	cute Health H	azard		
SARA 302 :			No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.			
SAR	A 313		: The following components are subject to reporting levels established by SARA Title III, Section 313:			
		F	ropan-2-ol	67-63-0	3.4086 %	
US S	tate Regulations					
Penn	sylvania Right To Ki	างพ				
	Ethanol			64-17-5	50 - 70 %	
	Water			7732-18-5	30 - 50 %	
	Propan-2-	ol		67-63-0	1 - 5 %	
New	Jersey Right To Kno	w				
	Ethanol			64-17-5	50 - 70 %	
	Water			7732-18-5	30 - 50 %	
	Propan-2-	ol		67-63-0	1 - 5 %	
Califo	ornia Prop 65	5	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.			

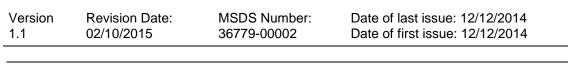
AICS

: 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)





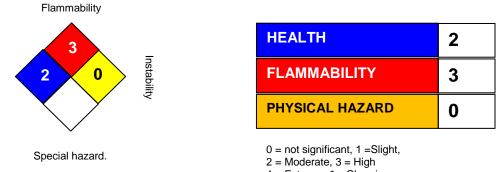
SECTION 16. OTHER INFORMATION

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 Limits 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.

US / Z8