

Version 1.2	Revision Date: 03/18/2015	-	S Number: 9-00003	Date of last issue: 02/10/2015 Date of first issue: 12/12/2014	
SECTION	1. IDENTIFICATION				
Produ	ct name	: P	URELL® Advan	ced Hand Sanitizer Aloe Gel	
Manu	facturer or supplier's	details	5		
	any name of supplier		OJO Industries,	Inc.	
Addre	SS		One GOJO Plaza, Suite 500 Akron OH 44311		
Telepł	none	: 1	(330) 255-6000		
Emerç	gency telephone	: 1	-800-424-9300	CHEMTREC	
Recor	nmended use of the o	hemic	al and restriction	ons on use	
Recon	nmended use	: H	and Sanitizer		
Restrie	ctions on use	c fo e V c p a s e in	onsumers and o preseeable use pecifically define xempt from the r /hile this materia ontains valuable roper use of the s well as unusua pills. This SDS s mployees and o ttended-use guid	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 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. H319 Causes serious eye irritation.



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Preca	autionary Statements	No smoking. P233 Keep com P241 Use explo equipment. P242 Use only f P243 Take pred P264 Wash skin P280 Wear prof 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 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 seriou	: 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.		
Note	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 s fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to b	
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.	iratus.

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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Metho	ods and materials for	Prevent spreadir barriers). Retain and dispo Local authorities cannot be contai	
Methods and materials for containment and cleaning up		 Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water sp jet. 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 item employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding 	

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 ls 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 air purifyi hazardous c supplied res release, exp	MSHA approved respirators. Protection provided ng respirators against exposure to any hemical is limited. Use a positive pressure air pirator if there is any potential for uncontrolled osure levels are unknown, or any other e where air purifying respirators may not provide otection.
	nd protection Material	: Impervious	gloves
I	Material	: Flame retard	dant gloves
I	Remarks	on the conce time is not d For special a resistance to gloves with	ves to protect hands against chemicals depending entration specific to place of work. Breakthrough etermined 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	e protection	: Wear the fol Safety gogg	lowing personal protective equipment: les
Ski	in and body protection	resistance d potential. Wear the fol Flame retard Skin contact	opriate protective clothing based on chemical ata and an assessment of the local exposure lowing personal protective equipment: dant antistatic protective clothing. must be avoided by using impervious protective ves, aprons, boots, etc).
Hy	giene measures	located clos When using	eye flushing systems and safety showers are e to the working place. do not eat, drink or smoke. minated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	clear, light green
Odor	:	alcohol-like
Odor Threshold	:	No data available
рН	:	6.5 - 8.5
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	76 °C



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	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	9
	Vapor p	pressure	:	No data available	9
	Relative	e vapor density	:	No data available	9
	Density	/	:	0.881 g/cm3	
	Solubili Wate	ty(ies) er solubility	:	soluble	
	Partitio octanol	n coefficient: n- /water	:	Not applicable	
	Autoigr	nition temperature	:	No data available)
	Decom	position temperature	:	The substance of	r mixture is not classified self-reactive.
	Viscosi Visco	ty osity, kinematic	:	3,500 - 23,000 m	m2/s (20 °C)
	Explosi	ve properties	:	Not explosive	
	Oxidizir	ng properties	:	The substance of	r 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.



Inform Inhalati Skin co			
Inhalati Skin co	ion	es of exposure	
Ingestio Eye co	on		
Acute	toxicity		
Not cla	ssified based on ava	ilable information.	
Produc			
Acute o	oral toxicity		y estimate: > 5,000 mg/kg culation method
Ingred			
Ethanc Acute o	oral toxicity	: LD50 (Rat):	> 5,000 mg/kg
Acute i	nhalation toxicity	: LC50 (Rat): Exposure tin Test atmosp	ne: 4 h
Propar			
Acute o	oral toxicity	: LD50 (Rat):	> 5,000 mg/kg
Acute i	nhalation toxicity	: LC50 (Rat): Exposure tin Test atmosp	ne: 4 h
Acute of	dermal toxicity	: LD50 (Rat):	> 5,000 mg/kg
Skin ce	orrosion/irritation		
Not cla	ssified based on ava	ilable information.	
Produc	<u>ct:</u>		
Result:	No skin irritation		
Ingred	ients:		

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	es: Rabbit	versing within 21 days line 405	
Speci	an-2-ol: es: Rabbit t: Irritation to eyes, re	versing within 21 days	
Skin s		tization sified based on availab lot classified based on a	
<u>Produ</u> Asses	<u>uct:</u> ssment: Does not cau	se skin sensitization.	
Route Speci Resul Propa Test 1 Route Speci Metho	nol: Type: Local lymph nodes of exposure: Skin d es: Mouse t: negative an-2-ol: Type: Buehler Test es of exposure: Skin d es: Guinea pig od: OECD Test Guide t: negative	ontact	
	cell mutagenicity assified based on ava	ailable information.	
	dients:		
Ethar Genot	tol: toxicity in vitro	: Test Type: In vi Result: negative	tro mammalian cell gene mutation test
Genot	toxicity in vivo	: Test Type: Rod Species: Mouse Application Rou Result: negative	te: Ingestion
	an-2-ol: toxicity in vitro	: Test Type: Bact Result: negative	erial reverse mutation assay (AMES)
Geno	toxicity in vivo	cytogenetic ass Species: Mouse	



ersion 2	Revision Date: 03/18/2015		S Number: 9-00003	Date of last issue: 02/10/2015 Date of first issue: 12/12/2014
	nogenicity assified based on availa	ble inf	ormation.	
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	:	equa		s product present at levels greater than or entified as probable, possible or confirmed by IARC.
OSH	A	equa		s product present at levels greater than or entified as a carcinogen or potential carcino-
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.		
Not cl	oductive toxicity assified based on availa dients:	ble inf	ormation.	
Ethar		S A N	pecies: Mouse pplication Rout	generation reproduction toxicity study e: Ingestion Fest Guideline 416
	a n-2-ol: s on fertility	S A	est Type: Two- pecies: Rat pplication Rout esult: negative	generation reproduction toxicity study e: Ingestion
	s on fetal development	S	est Type: Embi pecies: Rat pplication Rout	yo-fetal development
Effect			esult: negative	e. Ingestion
STOT	-single exposure assified based on availa	R	esult: negative	

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:	8 d		
Toxicity to bacteria			: EC50 (Pseudomonas putida): > 1,050 mg/l Exposure time: 16 h		
Persi	stence and degrada	bility			
	dients:				
Ethar Biode	nol: gradability	: Result: Readily Biodegradation: Exposure time:	84 %		
Propan-2-ol: Biodegradability		: Result: rapidly degradable			
Bioad	cumulative potentia	ıl			
Ingre	dients:				
	nol: ion coefficient: n- ol/water	: log Pow: -0.35			
Propa	an-2-ol:				
	ion coefficient: n- ol/water	: log Pow: 0.05			
Mobil	lity in soil				
No da	ata available				
Other	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 Packir Labels	ng group	(Ethanol, Propan-2-ol) : 3 : III : 3		
Class Packir Labels Packir aircraf Packir	No. r shipping name ng group s ng instruction (cargo	 UN 1987 Alcohols, n.o.s. (Ethanol, Propan-2-ol) 3 III Flammable Liquids 366 355 		
IMDG UN nu Prope Class Packir Labels EmS (-Code Imber r shipping name ng 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 CF UN/ID	_	: UN 1987 : ALCOHOLS, N.O.S.		
Class Packir	ng group	: 3 : III		

Packing group	
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



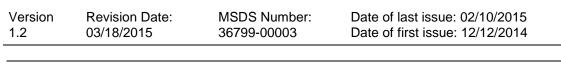
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		1	Acute Health Ha	azard	
SARA	A 302			n this material are subject to th f SARA Title III, Section 302.	he reporting
SARA	A 313		: The following components are subject to reporting levels established by SARA Title III, Section 313:		
		I	Propan-2-ol	67-63-0	3.4086 %
US St	tate Regulations				
Penn	sylvania Right To Kr	ow			
	Ethanol			64-17-5	50 - 70 %
	Water			7732-18-5	30 - 50 %
	Propan-2-o	bl		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-o	bl		67-63-0	1 - 5 %
Califo	ornia Prop 65		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), TCSI (Taiwan), TSCA (USA)





SECTION 16. OTHER INFORMATION

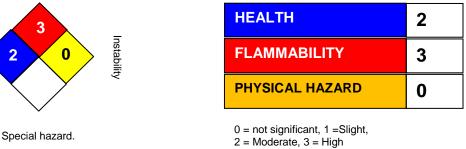
Flammability

Further information



Health





HMIS III:

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 Agency, http://echa.europa.eu/
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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