

Version 1.1	Revision Date: 02/10/2015		DS Number: 227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
SECTION	1. IDENTIFICATION			
Produ	ct name	:	PURELL® Advan	ced Instant Hand Sanitizer Foam
Manu	facturer or supplier's	deta	ils	
	any name of supplier	:		Inc.
Addre	SS	:	One GOJO Plaza Akron OH 44311	, Suite 500
Teleph	none	:	1 (330) 255-6000	
Emerg	gency telephone	:	1-800-424-9300	CHEMTREC
Recor	nmended use of the c	chem	ical 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, 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.



Version 1.1	Revision Date: 02/10/2015	MSDS Number: 33227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
1.1		33227-00002 H319 Causes set Prevention: P210 Keep awa 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 a attention. Storage: P403 + P235 St Disposal:	Date of first issue: 12/02/2014 erious eye irritation. y from heat/sparks/open flames/hot surfaces cainer tightly closed. sion-proof electrical/ ventilating/ lighting/ non-sparking tools. autionary measures against static discharge. a 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
		disposal plant.	

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.	



Version 1.1	Revision Date: 02/10/2015	MSDS Number: 33227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
In cas	e of eye contact	for at least 15 mi	nove contact lens, if worn.
lf swa	llowed	Get medical atte	NOT induce vomiting. ntion if symptoms occur. roughly with water.
	important symptoms ffects, both acute and ed	: Causes serious e	eye irritation.
Prote	ction of first-aiders	and use the reco	lers should pay attention to self-protection, mmended personal protective equipment al for exposure exists.
Notes	to physician	: Treat symptomat	tically 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 Silicon 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.



Versio 1.1	on	Revision Date: 02/10/2015		DS Number: 227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
•		ve equipment and ncy procedures			ective equipment. ing advice and personal protective mendations.
E	Environ	mental precautions	:	Prevent further lea Prevent spreading barriers). Retain and dispos	e environment must be avoided. akage or spillage if safe to do so. g over a wide area (e.g. by containment or oil se of contaminated wash water. should be advised if significant spillages ed.
-		s and materials for ment and cleaning up	:	Suppress (knock jet. For large spills, pro- containment to kee can be pumped, so container. Clean up remaining absorbent. Local or national of disposal of this m employed in the of determine which in Sections 13 and 1	s should be used. t absorbent material. down) gases/vapors/mists with a water spray rovide diking or other appropriate eep material from spreading. If diked material store recovered material in appropriate ng materials from spill with suitable regulations may apply to releases and aterial, as well as those materials and items leanup of releases. You will need to regulations are applicable. 5 of this SDS provide information regarding tional 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.



Version 1.1	Revision Date: 02/10/2015	MSDS Number: 33227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
Materia	als to avoid	Store in accordar Keep away from	rell-ventilated place. hee with the particular national regulations. heat and sources of ignition. the following product types:
		•	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	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.



Version 1.1	Revision Date: 02/10/2015		DS Number: 227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
Pers	sonal protective equip	ment		
Res	piratory protection	:	maintain vapor ex concentrations ar unknown, approp Follow OSHA res use NIOSH/MSH/ by air purifying re hazardous chemi 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 laterial	:	Impervious gloves	6
М	aterial	:	Flame retardant g	loves
R	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 hined 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 a potential. Wear the followin 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	:	fruity



Vers 1.1	sion	Revision Date: 02/10/2015		DS Number: 27-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
	Odor T	hreshold	:	No data available	
	рН		:	6 - 9	
	Melting	point/freezing point	:	No data available	
	Initial boiling point and boiling range		:	No data available	
	Flash p	oint	:	27 °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	
	Vapor pressure		:	No data available	
	Relative vapor density		:	No data available	
	Density		:	0.8810 g/cm3	
	Solubili Wate	ty(ies) er solubility	:	soluble	
	Partitio octanol	n coefficient: n- /water	:	Not applicable	
	Autoigr	ition temperature	:	No data available	
	Decom	position temperature	:	The substance or	mixture is not classified self-reactive.
	Viscosi Visco	ty osity, kinematic	:	10 - 20 mm2/s (2	0 °C)
	Explosi	ve properties	:	Not explosive	
	Oxidizir	ng 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.



ersion I	Revision Date: 02/10/2015	MSDS Number: 33227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
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	es of exposure	
	e toxicity		
Not cl	lassified based on ava	lable information.	
Produ Acute	uct: oral toxicity		estimate: > 5,000 mg/kg Ilation method
Ethar Acute	dients: nol: e oral toxicity e inhalation toxicity	: LD50 (Rat): > : LC50 (Rat): 1 Exposure time Test atmosph	24.7 mg/l e: 4 h
	an-2-ol: e 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
	corrosion/irritation lassified based on ava	lable information.	
Produ			
Resul	It: No skin irritation		
Ethar	<mark>dients:</mark> 1 01: es: Rabbit		

Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation



Version	Revision Date:	MS
1.1	02/10/2015	332

SDS Number: 227-00002

Date of last issue: 12/02/2014 Date of first issue: 12/02/2014

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



Version 1.1	Revision Date: 02/10/2015	MSDS Number: 33227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014			
	ppan-2-ol: notoxicity in vitro	: Test Type: Bac Result: negative	terial reverse mutation assay (AMES) e			
Gei	notoxicity in vivo	cytogenetic ass Species: Mouse Application Rou	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Result: negative			
	r cinogenicity classified based on availa	ble information.				
Pro Spe App Exp Me	redients: ppan-2-ol: ecies: Rat blication Route: inhalation posure time: 104 weeks thod: OECD Test Guidelin sult: negative	/				
IAF	3 7		is product present at levels greater than or lentified as probable, possible or confirmed by IARC.			
os	SHA		is product present at levels greater than or lentified as a carcinogen or potential carcino-			
NT	Ρ		is product present at levels greater than or lentified as a known or anticipated carcinogen			
	productive toxicity classified based on availa	ble information.				
	redients:					
	anol: ects on fertility	Species: Mouse Application Rou	ite: Ingestion Test Guideline 416			
	ppan-2-ol: ects on fertility	: Test Type: Two Species: Rat Application Rou Result: negative				
Effe	ects on fetal development	: Test Type: Eml Species: Rat Application Rot	oryo-fetal development ite: Ingestion			



Version	Revision Date:	MSDS Number:	Date of last issue: 12/02/2014
1.1	02/10/2015	33227-00002	Date of first issue: 12/02/2014

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: 227-00002	Date of last issue: 12/02/2014 Date of first issue: 12/02/2014
Toxic	ty to bacteria	:	EC50 (Photoba Exposure time	acterium phosphoreum): 32.1 mg/l 0.25 h
Propan-2-ol: Toxicity to fish		:	LC50 (Pimeph Exposure time	ales promelas (fathead minnow)): 10,000 mg, 96 h
	ty to daphnia and other ic invertebrates	:	EC50 (Daphnia Exposure time	a magna (Water flea)): > 10,000 mg/l 24 h
Toxic	ty to algae	:	ErC50 (Scened mg/l Exposure time:	lesmus quadricauda (Green algae)): > 1,800 8 d
Toxic	ty to bacteria	:	EC50 (Pseudo Exposure time:	monas putida): > 1,050 mg/l 16 h
Persi	stence and degradabili	ity		
Ethar	<u>dients:</u> nol: gradability	:	Result: Readily Biodegradatior Exposure time	: 84 %
	a n-2-ol: gradability	:	Result: rapidly	degradable
Bioad	cumulative potential			
<u>Ingre</u> Ethar	dients:			
Partiti	on coefficient: n- ol/water	:	log Pow: -0.35	
Partiti	an-2-ol: on coefficient: n- ol/water	:	log Pow: 0.05	
Mobil	ity in soil			
No data available				
Other adverse effects No data available				

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Dispose of in accordance with local regulations.
Contaminated packaging	: Dispose of as unused product.



Version	Revision Date:	MSDS Number:	Date of last issue: 12/02/2014
1.1	02/10/2015	33227-00002	Date of first issue: 12/02/2014
		Empty contains	re 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

International Regulation		
UNRTDG UN number Proper shipping name	:	UN 1987 ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol)
Class Packing group Labels	-	3 III 3
IATA-DGR UN/ID No. Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft)	· · · · · · · · · · · · · · · · · · ·	UN 1987 Alcohols, n.o.s. (Ethanol, Propan-2-ol) 3 III Flammable Liquids 366 355
IMDG-Code UN number Proper shipping name Class Packing group Labels EmS Code Marine pollutant		UN 1987 ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol) 3 III 3 F-E, S-D no
Transport in bulk according t	0	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



Version	Revision Date:	MSDS Number:	Date of last issue: 12/02/2014
1.1	02/10/2015	33227-00002	Date of first issue: 12/02/2014
Marine	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 mate requirements of SARA Ti		e reporting
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 %
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 Ri	ght To Know			
	Ethanol		64-17-5	50 - 70 %
	Water		7732-18-5	30 - 50 %
	Propan-2-ol		67-63-0	1 - 5 %
Dimethyl Siloxane, Dimethyl(propyl(polyeth oxide))hydroxy)siloxy-te		l(polyethylene	102783-01-7	1 - 5 %
California Pro	o 65	This product does not co State of California to cau 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)



MSDS Number:

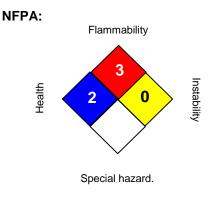
33227-00002

VersionRevision Date:1.102/10/2015

Date: 15 Date of last issue: 12/02/2014 Date of first issue: 12/02/2014

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.

US / Z8