

Version 1.1	Revision Date: 02/18/2015	MSDS Nu 36539-00		Date of last issue: 12/11/2014 Date of first issue: 12/11/2014
SECTION	1. IDENTIFICATION			
Produ	ct name	: PURE	LL® Advar	ced Instant Hand Sanitizer Foam
Manu	facturer or supplier's	letails		
	any name of supplier		Industries	, Inc.
Addre	SS		GOJO Plaza OH 44311	a, Suite 500
Telep	hone	: 1 (330	)) 255-6000	
Emerç	gency telephone	: 1-800	-424-9300	CHEMTREC
Reco	mmended use of the c	nemical ar	nd restricti	ons on use
Recor	nmended use	: Hand	Sanitizer	
Restri	ctions on use	consu forese specif exemp While contai prope as we spills. emplo intend	mers and o eable use. ically define of from the this materia ns valuable r use of the II as unusua This SDS s yees and o ed-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 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.



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		H319 Causes s	erious eye irritation.
Preca	utionary Statements	No smoking. P233 Keep com P241 Use explo- equipment. P242 Use only in P243 Take prece P264 Wash skin P280 Wear profe <b>Response:</b> P303 + P361 + all contaminated P305 + P351 + for several minu- to do. Continue P337 + P313 If attention. <b>Storage:</b> P403 + P235 St <b>Disposal:</b>	ay from heat/sparks/open flames/hot surfaces tainer tightly closed. bsion-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 ites. Remove contact lenses, if present and easy rinsing. eye irritation persists: Get medical advice/ tore in a well-ventilated place. Keep cool. of 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 medic advice immediately. When symptoms persist or in all cases of doubt seek m 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.
If sw	allowed	Get medical a	DO NOT induce vomiting. ttention if symptoms occur. thoroughly with water.
	important symptoms effects, both acute and /ed	: Causes serior	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	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 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.



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protective equipment and emergency procedures				Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.					
Er	nviror	nmental precautions	:	Prevent further le 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 ned.				
		ls and materials for ment and cleaning up	:	Suppress (knock jet. For large spills, p containment to ke can be pumped, s container. Clean up remaining absorbent. Local or national disposal of this m employed in the of determine which Sections 13 and	Is 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 cleanup of releases. You will need to regulations are applicable. 15 of this SDS provide information regarding attional 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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		Store in accordar	rell-ventilated place. nce with the particular national regulations. heat and sources of ignition.
Materia	als to avoid	Strong oxidizing a Organic peroxide Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating subs	s 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.



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Per	sonal protective equipn	nent		
Res	piratory protection	:	maintain vapor ex concentrations ar unknown, approp Follow OSHA res use NIOSH/MSH/ by air purifying res hazardous chemic supplied respirato release, exposure	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	5
Ν	laterial	:	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 ined 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:
Skir	and 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. t be avoided by using impervious protective aprons, boots, etc).
Hyg	iene 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, yellow
Odor	: fruity



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	Odor T	hreshold	:	No data available	
	рН		:	5.5 - 9.0	
	Melting	point/freezing point	:	No data available	
	Initial b range	oiling point and boiling	:	75 °C	
	Flash p	oint	:	25.5 °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 p	pressure	:	No data available	
	Relative	e vapor density	:	No data available	
	Density	,	:	0.895 g/cm3	
		er solubility	:		
	octanol	n coefficient: n- /water	:	Not applicable	
	Autoign	ition temperature	:	No data available	
	Decom	position temperature	:	The substance or	mixture is not classified self-reactive.
	Viscosi <sup>.</sup> 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.



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Cond	itions to avoid	: Heat, flames a	nd sparks.					
Incon	npatible materials	: Oxidizing agen	ts					
Haza produ	rdous decomposition acts	: No hazardous	: No hazardous decomposition products are known.					
SECTION	11. TOXICOLOGICAL	INFORMATION						
Inhala Skin ( Inges	contact	es of exposure						
	<b>e toxicity</b> lassified based on avai	lable information.						
-	dients:							
Ethai Acute	nol: e oral toxicity	: LD50 (Rat): > 5	,000 mg/kg					
Acute	inhalation toxicity	: LC50 (Rat): 124 Exposure time: Test atmospher	4 h					
Prop	an-2-ol:							
Acute	e oral toxicity	: LD50 (Rat): > 5	,000 mg/kg					
Acute	inhalation toxicity	: LC50 (Rat): 72. Exposure time: Test atmospher	4 h					
Acute	e dermal toxicity	: LD50 (Rat): > 5	,000 mg/kg					
	corrosion/irritation							
Not c	lassified based on avai	lable information.						

Product:

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



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### 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
<b>Propan-2-ol:</b> Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo



rsion	Revision Date: 02/18/2015	MSDS Number: 36539-00002	Date of last issue: 12/11/2014 Date of first issue: 12/11/2014
		cytogenetic a Species: Mor Application R Result: nega	use coute: Intraperitoneal injection
	nogenicity assified based on availa	able information.	
	dients:		
Propa Speci Applic Expos Metho	an-2-ol: es: Rat cation Route: inhalation sure time: 104 weeks od: OECD Test Guidelin t: negative	,	
IARC	:		this product present at levels greater than or identified as probable, possible or confirmed pen by IARC.
OSH	A		this product present at levels greater than or identified as a carcinogen or potential carcino-
NTP			this product present at levels greater than or identified as a known or anticipated carcinogen
•	oductive toxicity		
	assified based on availa	able information.	
<u>Ingre</u> Ethar	<u>dients:</u> ool:		
	s on fertility	Species: Mor Application R	Coute: Ingestion CD Test Guideline 416
Propa	an-2-ol:		
Effect	s on fertility	Species: Rat	oute: Ingestion
Effect	s on fetal development	Species: Rat	oute: Ingestion

### STOT-single exposure

Not classified based on available information.



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### 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	<ul> <li>EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 72 h Method: OECD Test Guideline 201</li> </ul>
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
<b>Propan-2-ol:</b> Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l



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				Exposure time: 96	5 h
		/ to daphnia and other invertebrates	:	EC50 (Daphnia m Exposure time: 24	agna (Water flea)): > 10,000 mg/l h
	Toxicity	∕ to algae	:	ErC50 (Scenedes mg/l Exposure time: 8 d	mus quadricauda (Green algae)): > 1,800 d
	Toxicity	/ to bacteria	:	EC50 (Pseudomo Exposure time: 16	nas putida): > 1,050 mg/l bh
	Persist	tence and degradabili	ity		
	<b>Ingredi</b> Ethanc Biodeg		:	Result: Readily bio Biodegradation: 8 Exposure time: 20	34 %
	<b>Propar</b> Biodeg	<b>1-2-ol:</b> radability	:	Result: rapidly de	gradable
	Bioacc	umulative potential			
	Ingredi Ethanc Partition octanol	<b>bl:</b> n coefficient: n-	:	log Pow: -0.35	
	Propar Partition octanol	n coefficient: n-	:	log Pow: 0.05	
		y in soil			
		a available			
	•	adverse effects a available			

### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Dispose of in accordance with local regulations.
Contaminated packaging	<ul> <li>Dispose of as unused product.</li> <li>Empty containers should be taken to an approved waste handling site for recycling or disposal.</li> <li>Do not burn, or use a cutting torch on, the empty drum.</li> </ul>



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### **SECTION 14. TRANSPORT INFORMATION**

### International Regulation

UNRTDG	
UN number	: UN 1987
Proper shipping name	: ALCOHOLS, N.O.S.
	(Ethanol, Propan-2-ol)
Class	: 3
Packing group	: 111
Labels	: 3
IATA-DGR	
UN/ID No.	: UN 1987
Proper shipping name	: Alcohols, n.o.s.
	(Ethanol, Propan-2-ol)
Class	: 3
Packing group	: 111
Labels	: Flammable Liquids
Packing instruction (cargo	: 366
aircraft)	
Packing instruction	: 355
(passenger aircraft)	
IMDG-Code	
UN number	: UN 1987
Proper shipping name	: ALCOHOLS, N.O.S.
Class	(Ethanol, Propan-2-ol) : 3
Packing group	: 11
Labels	: 3
EmS Code	: F-E, S-D
Marine pollutant	: no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### Domestic regulation

<b>49 CFR</b> UN/ID/NA number Proper shipping name	-	UN 1987 ALCOHOLS, N.O.S.
Class Packing group Labels	:	3 III FLAMMABLE LIQUID
ERG Code Marine pollutant	:	127 no



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### **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 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:		
			Propan-2-ol	67-63-0	3.013 %
US State Regu	llations				
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 %
·			1 - 5 %		
California Pro	p 65		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:					
REACH		:	All ingredients (pre-)registe	red or exempt.	
TSCA		:	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.		
DSL		:	All chemical substances in 1999 and NSNR and are or Canadian Domestic Substa	n or exempt from listi	



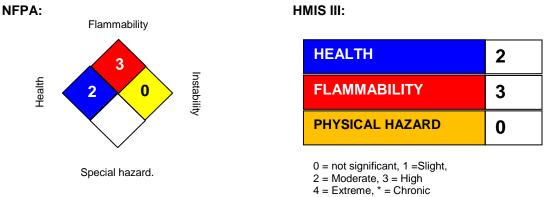
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AICS		: All ingredients I	isted or exempt.

#### 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**



### Full text of other abbreviations

ACGIH ACGIH BEI NIOSH REL OSHA Z-1	:	USA. ACGIH Threshold Limit Values (TLV) ACGIH - Biological Exposure Indices (BEI) USA. NIOSH Recommended Exposure Limits 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/
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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 pro-



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vided 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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