GJ1999 - 2156



PURELL® Advanced Instant Hand Sanitizer

Version 1.1	Revision Date: 02/10/2015		SDS Number: 5762-00002	Date of last issue: 12/12/2014 Date of first issue: 12/12/2014	
SECTION	1. IDENTIFICATION				
Produ	ct name	:	PURELL® Advan	ced Instant Hand Sanitizer	
Manu	facturer or supplier's	deta	ails		
	any name of supplier	:		Inc.	
Addre	SS	:	One GOJO Plaza, Suite 500 Akron OH 44311		
Telep	hone	:	1 (330) 255-6000		
Emer	gency telephone	:	1-800-424-9300 (CHEMTREC	
Reco	mmended use of the c	hen	nical and restrictio	ons on use	
Recor	nmended use	:	Hand Sanitizer		
Restri	ctions on use	:	consumers and of foreseeable use. (specifically define exempt from the r While this materia contains valuable proper use of the as well as unusua spills. This SDS sl employees and ot intended-use guid	care or cosmetic product that is safe for ther users under normal and reasonably Cosmetics and consumer products, d by regulations around the world, are equirement of an SDS for the consumer. I is not considered hazardous, this SDS information critical to the safe handling and product for industrial workplace conditions I and unintended exposures such as large hould be retained and available for her users of this product. For specific ance, 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 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 attention. Storage: P403 + P235 St Disposal:	ay from heat/sparks/open flames/hot surfaces tainer tightly closed. Ision-proof electrical/ ventilating/ lighting/ hon-sparking tools. Fautionary measures against static discharge. In thoroughly after handling. Fective 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/ 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

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 wate for at least 15 minutes. If easy to do, remove contact lens, if worn.

SECTION 4. FIRST AID MEASURES



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lf sw	allowed	Get medical at	tention. OO NOT induce vomiting. tention if symptoms occur. horoughly with water.
	t important symptoms effects, both acute and yed	: Causes seriou	s eye irritation.
Prot	ection of first-aiders	and use the re	nders should pay attention to self-protection, commended personal protective equipment ntial for exposure exists.
Note	es to physician	: Treat symptom	natically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	A D	Vater spray Icohol-resistant foam ry chemical arbon dioxide (CO2)
Unsuitable extinguishing media	: H	ligh volume water jet
Specific hazards during fire fighting	fii Fi V	o not use a solid water stream as it may scatter and spread re. lash back possible over considerable distance. apors may form explosive mixtures with air. xposure to combustion products may be a hazard to health.
Hazardous combustion prod- ucts	: C	arbon oxides
Specific extinguishing methods	ci U R so	se extinguishing measures that are appropriate to local ircumstances and the surrounding environment. se water spray to cool unopened containers. remove undamaged containers from fire area if it is safe to do o. vacuate area.
Special protective equipment for fire-fighters		n the event of fire, wear self-contained breathing apparatus. lse 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.
	ods and materials for inment 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 whick Sections 13 and	pols should be used. ert absorbent material. ex 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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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	CAS-No.	Value type	Control	Basis
		(Form of exposure)	parameters / Permissible concentration	
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
		parameters	specimen	pling time	concentratio 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.

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.
	protection terial	: Impervious	ploves
Ма	terial	: Flame retard	lant gloves
Rei	marks	on the conce time is not d For special a resistance to gloves with t	tes 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 he glove manufacturer. Wash hands before at the end of workday.
Eye p	rotection	: Wear the foll Safety goggl	owing personal protective equipment: es
Skin a	and body protection	resistance da potential. Wear the foll Flame retard Skin contact	priate protective clothing based on chemical ata and an assessment of the local exposure owing personal protective equipment: ant antistatic protective clothing. must be avoided by using impervious protective /es, aprons, boots, etc).
Hygiei	ne measures	located close When using	eye flushing systems and safety showers are to the working place. do not eat, drink or smoke. ninated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: gel
Color	: clear, light blue
Odor	: fruity
Odor Threshold	: No data available
рH	: 6.5 - 8.5
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: 73 °C



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Flast	n point	: 25 °C	
Evap	oration rate	: No data available	
Flam	mability (solid, gas)	: Not applicable	
Uppe	er explosion limit	: No data available	
Lowe	er explosion limit	: No data available	
Vapo	or pressure	: No data available	
Rela	tive vapor density	: No data available	
Dens	sity	: 0.881 g/cm3	
	bility(ies) ater solubility	: soluble	
	tion coefficient: n- nol/water	: Not applicable	
Auto	ignition temperature	: No data available	
Deco	mposition temperature	: The substance or mixture is not classified self-reactive	÷.
Visco Vi	osity scosity, kinematic	: 1,000 - 17,000 mm2/s (20 °C)	
Explo	osive properties	: Not explosive	
Oxid	izing 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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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely rout Inhalation Skin contact Ingestion Eye contact	es of exposure
Acute toxicity Not classified based on ava	ilable information.
Product:	
Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
<u>Ingredients:</u> Ethanol:	
Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 124.7 mg/l Exposure time: 4 h Test atmosphere: vapor
Propan-2-ol:	
Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 72.6 mg/l Exposure time: 4 h Test atmosphere: vapor
Acute dermal toxicity	: LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Not classified based on available 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

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:



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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
Propan-2-ol:	
• • • • • • • •	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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	nogenicity		
Not cl	assified based on availa	ble information.	
Ingre	dients:		
Speci Applic Expose Metho	a n-2-ol: es: Rat cation Route: inhalation (sure time: 104 weeks od: OECD Test Guideline t: negative		
IARC			nis product present at levels greater than or lentified as probable, possible or confirmed n by IARC.
OSH	A		is product present at levels greater than or lentified as a carcinogen or potential carcino-
NTP			nis product present at levels greater than or lentified as a known or anticipated carcinoge
керг	oductive toxicity		
Ingre	assified based on availa dients:	ble information.	
<u>Ingre</u> Ethar	assified based on availa dients:	: Test Type: Two Species: Mouse Application Rot	ute: Ingestion Test Guideline 416
Ingre Ethar Effect	assified based on availa dients: nol: s on fertility	: Test Type: Two Species: Mouse Application Rot Method: OECD	e ute: Ingestion Test Guideline 416
Ingre Ethar Effect	assified based on availa <u>dients:</u> nol:	: Test Type: Two Species: Mouse Application Rot Method: OECD Result: negative	e ute: Ingestion Test Guideline 416 e p-generation reproduction toxicity study ute: Ingestion
Ingre Ethar Effect Propa	assified based on availa dients: nol: s on fertility an-2-ol:	 Test Type: Two Species: Mouse Application Rou Method: OECD Result: negative Test Type: Two Species: Rat Application Rou Result: negative 	e ute: Ingestion Test Guideline 416 e o-generation reproduction toxicity study ute: Ingestion e oryo-fetal development ute: Ingestion
Ingre Ethar Effect Effect	assified based on availa dients: nol: s on fertility an-2-ol: s on fertility s on fetal development	 Test Type: Two Species: Mouse Application Rou Method: OECD Result: negative Test Type: Two Species: Rat Application Rou Result: negative Test Type: Eml Species: Rat Application Rou Result: negative 	e ute: Ingestion Test Guideline 416 e o-generation reproduction toxicity study ute: Ingestion e oryo-fetal development ute: Ingestion
Ingre Ethar Effect Effect	assified based on availa dients: nol: s on fertility an-2-ol: s on fertility	 Test Type: Two Species: Mouse Application Rou Method: OECD Result: negative Test Type: Two Species: Rat Application Rou Result: negative Test Type: Eml Species: Rat Application Rou Result: negative 	e ute: Ingestion Test Guideline 416 e o-generation reproduction toxicity study ute: Ingestion e oryo-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/ 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		
Ingre	dients:			
Ethar Biode	nol: egradability	: Result: Readily Biodegradation: Exposure time:	84 %	
	a n-2-ol: egradability	: Result: rapidly c	legradable	
Bioad	cumulative potentia	1		
Ingre	<u>dients:</u>			
	nol: ion coefficient: n- ol/water	: log Pow: -0.35		
Partit	a n-2-ol: ion coefficient: n- ol/water	: log Pow: 0.05		
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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	,	(Ethanol, Pr	opan-2-ol)
Class		: 3	
	ing group	: 111	
Labe	ls	: 3	
ΙΑΤΑ	-DGR		
UN/II	D No.	: UN 1987	
Prop	er shipping name	: Alcohols, n.o	D.S.
		(Ethanol, Pr	opan-2-ol)
Class	S	: 3	
Pack	ing group	: 111	
Labe	ls	: Flammable	Liquids
Pack aircra	ing instruction (cargo aft)	: 366	
Pack	ing instruction senger aircraft)	: 355	
IMD	G-Code		
	umber	: UN 1987	
Prop	er shipping name	: ALCOHOLS (Ethanol, Pr	
Clas	s	: 3	
Pack	king group	: 111	
Labe		: 3	
	Code	: F-E, S-D	
Marii	ne pollutant	: no	
Tran	sport in bulk accordin	g to Annex II of N	ARPOL 73/78 and the IBC Code
Not a	applicable for product as	s supplied.	
Dom	estic regulation		
49 C	FR		
LINI/I	D/NA number	· LINI 1087	

UN/ID/NA number	: UN 1987
Proper shipping name	: 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	zard		
SAR	A 302	:		this material are subject to th SARA Title III, Section 302.	ne reporting	
SAR	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 S	tate Regulations					
Penn	nsylvania Right To Kn	ow				
	Ethanol			64-17-5	50 - 70 %	
	Water			7732-18-5	30 - 50 %	
	Propan-2-o	l		67-63-0	1 - 5 %	
New	Jersey Right To Know	v				
	Ethanol	-		64-17-5	50 - 70 %	
	Water			7732-18-5	30 - 50 %	
	Propan-2-o			67-63-0	1 - 5 %	
Calif	ornia Prop 65			es not contain any chemicals ia to cause cancer, birth, or a ects.		
The i	ingredients of this pro	oduct	are reported in t	he following inventories:		
REA	СН	:	All ingredients (p	ore-)registered or exempt.		
TSC	A	:		stances in this material are i isting on the TSCA Inventory		
DSL		:	: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).			
AICS	5	:	All ingredients lis	sted or exempt.		
Invo	ntorios					

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)



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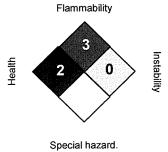
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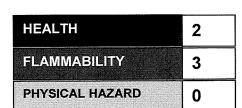
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SECTION 16. OTHER INFORMATION

Further information

NFPA:





0 = not significant, 1 =Slight,

2 = Moderate, 3 = High

HMIS III:

4 = Extreme, * = Chronic

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/
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