

Version 1.1	Revision Date: 02/10/2015		DS Number: 622-00002	Date of last issue: 12/11/2014 Date of first issue: 12/11/2014	
SECTIO	ON 1. IDENTIFICATION				
Pro	Product name		PURELL® Advanced Skin Nourishing Instant Hand Sanitizer Foam		
Ма	nufacturer or supplier's	deta	ils		
Со	mpany name of supplier	:			
Ad	Address		One GOJO Plaza, Suite 500 Akron OH 44311		
Te	lephone	:	1 (330) 255-6000		
Em	Emergency telephone		1-800-424-9300	CHEMTREC	
Re	commended use of the o	chem	ical and restriction	ons on use	
Re	commended use	:	Hand Sanitizer		
Re	cc fc sj e: W cc p a: sj e: in		This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling an proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided 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



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Hazard Statements		: H226 Flammable liquid and vapor. H319 Causes serious eye irritation.		
Preca	utionary Statements	No smoking. P233 Keep cont P241 Use explo equipment. P242 Use only r P243 Take prec P264 Wash skin P280 Wear prot Response: P303 + P361 + I all contaminated P305 + P351 + I for several minu to do. Continue P337 + P313 If attention. Storage: P403 + P235 St 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. 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 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
Glycerine	56-81-5	>= 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.



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In case of skin contact			ater and soap as a precaution. attention if symptoms occur.		
In case of eye contact		 In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention. 			
If swallowed		Get medical a	 If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water. 		
Most important symptoms and effects, both acute and delayed		: Causes serio	us eye irritation.		
Prote	ection of first-aiders	and use the r	onders should pay attention to self-protection, ecommended personal protective equipment ential for exposure exists.		
Note	s to physician	: Treat sympto	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.



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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. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
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 spray 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 items 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 certain local or 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



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		environment.	
Condi	itions for safe storage	Keep tightly clo Keep in a cool, Store in accord	y labeled containers. sed. well-ventilated place. ance with the particular national regulations. n heat and sources of ignition.
Materials to avoid		Strong oxidizing Organic peroxic Flammable solid Pyrophoric liqui Pyrophoric solid Self-heating sul	les ds ds ds bstances and mixtures d mixtures which in contact with water emit

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with	workplace	control	parameters
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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
Glycerine	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1

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	40 mg/l	ACGIH



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					shift at end of work- week	F	BEI
Engir	neering measures	:	Minimize workpla Use only in an a ventilation. Use with local ex	rea equipped	with explosio		ust
Perso	onal protective equip	ment					
Respi	iratory protection	:	General and loca maintain vapor e concentrations a unknown, approp Follow OSHA re- use NIOSH/MSH by air purifying re- hazardous chem supplied respirat release, exposur circumstance wh adequate protect	exposures belo re above reco priate respirato spirator regula IA approved re espirators aga ical is limited. or if there is a re levels are un here air purifyin	w recommer mmended lin ory protectior tions (29 CF espirators. Pl inst exposure Use a positiv ny potential f nknown, or a	nded limits. W nits or are n should be w R 1910.134) a rotection prov e to any ve pressure a for uncontrolle ny other	/here rorn. and rided ir ed
	protection terial	:	Impervious glove	es			
Ma	terial	:	Flame retardant	gloves			
Re	marks	:	Choose gloves to on the concentra- time is not detern For special appli resistance to che gloves with the g breaks and at the	ation specific to mined for the p cations, we re emicals of the plove manufac	o place of wo product. Cha commend cla aforementior turer. Wash I	rk. Breakthro nge gloves of arifying the ned protective	eugh iten!
Eye p	protection	:	Wear the followin Safety goggles	ng personal pr	otective equi	pment:	
Skin a	and body protection	:	Select appropria resistance data a potential. Wear the followin Flame retardant Skin contact mus clothing (gloves,	and an assess ng personal pr antistatic prote st be avoided	ment of the I otective equi ective clothin by using imp	ocal exposure pment: g.	e
Hygie	ne measures	:	Ensure that eye located close to When using do r Wash contamina	the working pl not eat, drink c	ace. or smoke.		e



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: clear, colorless, yellow
Odor	: alcohol-like
Odor Threshold	: No data available
рН	: 6.0 - 9.0
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: 23.6 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Density	: 0.88 g/cm3
Solubility(ies) Water solubility	: soluble
Partition coefficient: n- octanol/water	: Not applicable
Autoignition temperature	: No data available
Decomposition temperature	: The substance or mixture is not classified self-reactive.
Viscosity Viscosity, kinematic	: 10 - 20 mm2/s (20 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.



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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.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes Inhalation Skin contact Ingestion Eye contact	of	exposure
Acute toxicity		
Not classified based on availab	ole	information.
<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
Glycerine: Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Skin corrosion/irritation		

Not classified based on available information.

Product:

Result: No skin irritation



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Ingredients:

Ethanol:

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

Propan-2-ol:

Species: Rabbit Result: No skin irritation

Glycerine:

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

Glycerine:

Result: No eye irritation

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



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	Germ	cell mutagenicity								
	Not classified based on available information.									
	Ingredients:									
	Ethane Genote	ol: oxicity in vitro	:	Test Type: In vitro Result: negative	mammalian cell gene mutation test					
	Genoto	oxicity in vivo	:	Test Type: Roden Species: Mouse Application Route Result: negative	t dominant lethal test (germ cell) (in vivo) : Ingestion					
	Propa	n-2-ol:								
	Genoto	oxicity in vitro	:	Test Type: Bacter Result: negative	ial reverse mutation assay (AMES)					
	Genoto	oxicity in vivo	:	cytogenetic assay Species: Mouse	alian erythrocyte micronucleus test (in vivo) : Intraperitoneal injection					
	Glycer	rine:								
	Genoto	oxicity in vitro	:	Test Type: In vitro Method: OECD Te Result: negative	mammalian cell gene mutation test est Guideline 476					
		ogenicity								
	Not cla	assified based on availa	ble	information.						
	Exposi Method	n-2-ol:	-							
	Exposi									
	IARC		e		product present at levels greater than or tified as probable, possible or confirmed y IARC.					
	OSHA	ι.	e		product present at levels greater than or tified as a carcinogen or potential carcino-					



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NTP		e		product present at levels greater than or ntified as a known or anticipated carcinogen
-	oductive toxicity assified based on availa	ble	information	
	dients:			
Ethar		:	Species: Mouse Application Route	eneration reproduction toxicity study e: Ingestion est Guideline 416
	an-2-ol: s on fertility	:	Ū	eneration reproduction toxicity study
Effect	s on fetal development	:	Test Type: Embry Species: Rat Application Route Result: negative	vo-fetal development e: Ingestion
Glyce	erine:			
	s on fertility	:	Test Type: Two-g Species: Rat Application Route Result: negative	eneration reproduction toxicity study : Ingestion
Effect	s on fetal development	:	Test Type: Embry Species: Rabbit Application Route Result: negative	vo-fetal development e: Ingestion
STOT	-single exposure			
Not cl	assified based on availa	ble	information.	
Propa	dients: an-2-ol: ssment: May cause drow	/sine	ess or dizziness.	
	-repeated exposure	bla	information	
	assified based on availa	une	mormation.	
-	ated dose toxicity			
Ethar	dients: nol: os: Pot			



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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

Glycerine:

Species: Rat NOAEL: 167 mg/m3 LOAEL: 660 mg/m3 Application Route: inhalation (dust/mist/fume) Exposure time: 13 w Symptoms: Local irritation

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



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Toxicit	ty to algae	:	ErC50 (Scenede mg/l Exposure time:	esmus quadricauda (Green algae)): > 1,800 3 d
Toxicit	ty to bacteria	:	EC50 (Pseudomonas putida): > 1,050 mg/l Exposure time: 16 h	
Glyce Toxicit	rine: ty to fish	:	: LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 n Exposure time: 96 h	
	ty to daphnia and other c invertebrates	:	EC50 (Daphnia Exposure time:	magna (Water flea)): 1,955 mg/l 48 h
Toxicit	ty to bacteria	:	NOEC (Pseudor Exposure time:	nonas putida): > 10,000 mg/l 16 h
Persis	stence and degradabili	ity		
Ingred	dients:			
Ethan Biodeç	ol: gradability	:	Result: Readily Biodegradation: Exposure time:	84 %
	n -2-ol: gradability	:	Result: rapidly d	egradable
Glyce Biodeg	rine: gradability	:	Result: Readily Biodegradation: Exposure time:	94 %
Bioac	cumulative potential			
Ingred	dients:			
	ol: on coefficient: n- ol/water	:	log Pow: -0.35	
Partitic	n -2-ol: on coefficient: n- ol/water	:	log Pow: 0.05	
	rine: on coefficient: n- ol/water	:	log Pow: -1.76	
	ity in soil			
No do	ta available			



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Other adverse effects No data available					
SECTION 13. DISPOSAL CONSIDERATIONS					

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 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 to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.



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Dome	estic regulation		
	F R D/NA number er shipping name	: UN 1987 : ALCOHOLS,	N.O.S.
Label ERG	ng group s	: 3 : III : FLAMMABLE : 127 : no	ELIQUID

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 Healt				
SARA 302	:			al are subject to the r III, Section 302.	reporting	
SARA 313	:			are subject to reportii III, Section 313:	ng levels	
		Propan-2-ol		67-63-0	3.4086 %	
US State Regulations						
Pennsylvania I	Right To Know					
	Ethanol			64-17-5	50 - 70 %	
	Water			7732-18-5	20 - 30 %	
	Propan-2-ol			67-63-0	1 - 5 %	
	Glycerine			56-81-5	1 - 5 %	
New Jersey Right To Know						
	Ethanol			64-17-5	50 - 70 %	
	Water			7732-18-5	20 - 30 %	
	Propan-2-ol			67-63-0	1 - 5 %	
	Glycerine			56-81-5	1 - 5 %	
	Dimethyl Siloxar Dimethyl(propyl(oxide))hydroxy)s	polyethylene	ted	102783-01-7	1 - 5 %	

California Prop 65

This product does not contain any chemicals known to the



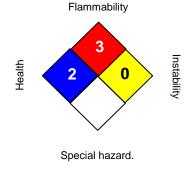
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		State of Cali reproductive	fornia to cause cancer, birth, or any other defects.
The i	ingredients of this pr	oduct are reported	in the following inventories:
REAC	СН	: All ingredien	ts (pre-)registered or exempt.
TSC/	A		substances in this material are included on or om listing on the TSCA Inventory of Chemical
DSL		1999 and NS	substances in this product comply with the CEPA SNR and are on or exempt from listing on the omestic Substances List (DSL).
AICS		: All ingredien	ts listed or exempt.
Inver	ntories		

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

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High

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



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NIOSH REL / ST		 STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday 8-hour time weighted average 		
OSHA Z-1 / TWA				
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.

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