

HOT SHOT 2[™] (R-417C)

Version 2.0	Revision Date: 10/25/2018	SDS Nun 2770442-		Date of last issue: 05/07/2018 Date of first issue: 05/07/2018	
SECTIC	N 1. IDENTIFICATION				
Product name		: HOT	HOT SHOT 2™ (R-417C)		
SD	S-Identcode	: 13000	130000144655		
	Manufacturer or supplier's of Company name of supplier		ails The Chemours Company FC, LLC		
Address			1007 Market Street Wilmington, DE 19899 United States of America (USA)		
Te	Telephone		1-844-773-CHEM (outside the U.S. 1-302-773-1000)		
Emergency telephone		773-2	Medical emergency: 1-866-595-1473 (outside the U.S. 1-302- 773-2000) ; Transport emergency: +1-800-424-9300 (outside the U.S. +1-703-527-3887)		
Re	commended use of the	chemical a	nd restricti	ons on use	
Re	Recommended use		Refrigerant		

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordar Gases under pressure :	nce with 29 CFR 1910.1200 Liquefied gas
Simple Asphyxiant	
GHS label elements Hazard pictograms :	
Signal Word :	Warning
Hazard Statements :	H280 Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation.
Precautionary Statements :	Storage: P410 + P403 Protect from sunlight. Store in a well-ventilated place.

Other hazards

Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. Misuse or intentional inhalation abuse may cause death without warning symptoms, due to cardiac effects.

Rapid evaporation of the product may cause frostbite.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
1,1,1,2-Tetrafluoroethane*	811-97-2	78.8
Pentafluoroethane*	354-33-6	19.5
Butane	106-97-8	1.7

Voluntarily-disclosed non-hazardous substance

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	:	Thaw frosted parts with lukewarm water. Do not rub affected area. Get medical attention immediately.
In case of eye contact	:	Get medical attention immediately.
If swallowed	:	Ingestion is not considered a potential route of exposure.
Most important symptoms and effects, both acute and delayed	:	Other symptoms potentially related to misuse or inhalation abuse are Cardiac sensitization Anaesthetic effects Light-headedness Dizziness confusion Lack of coordination Drowsiness Unconsciousness Contact with liquid or refrigerated gas can cause cold burns and frostbite.
Protection of first-aiders	:	No special precautions are necessary for first aid responders.
Notes to physician	:	Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray
		Alcohol-resistant foam
		Carbon dioxide (CO2)
		Dry chemical



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	Unsuital media	ble extinguishing	:	None known.	
	Specific hazards during fire fighting		:		pustion products may be a hazard to health. rises there is danger of the vessels bursting por pressure.
	Hazardo ucts	ous combustion prod-	:	Hydrogen fluoride carbonyl fluoride Carbon oxides Fluorine compoun	
	Specific extinguishing meth- ods		:	cumstances and t Fight fire remotely Use water spray to	measures that are appropriate to local cir- he surrounding environment. due to the risk of explosion. cool unopened containers. ged containers from fire area if it is safe to do
	Special for fire-f	protective equipment ighters	:	Wear self-contain necessary. Use personal prot	ed breathing apparatus for firefighting if ective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Evacuate personnel to safe areas. Avoid skin contact with leaking liquid (danger of frostbite). Ventilate the area. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.
Methods and materials for containment and cleaning up	:	Ventilate the area. 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	:	Use equipment rated for cylinder pressure. Use a backflow preventative device in piping. Close valve after each use and when empty.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	Do not breathe gas.



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		practice, based assessment Wear cold insu Valve protection remain in place piped to use po Use a check van hazardous back Prevent backfle Use a pressure to lower pressure Close valve aft or force fit cont Prevent the int Never attempt Do not drag, sl Use a suitable Keep away from Take precaution	alve or trap in the discharge line to prevent k flow into the cylinder. ow into the gas tank. e reducing regulator when connecting cylinder ure (<3000 psig) piping or systems. er each use and when empty. Do NOT change
Cond	ditions for safe storage	prevent falling Separate full c Do not store ne Avoid area who Do not expose 46°C (115°F) t drums. Material should shipping conta drum pump is shipping conta containers whe the exposure. Keep in proper Keep away fro	Id be stored upright and firmly secured to or being knocked over. ontainers from empty containers. ear combustible materials. ere salt or other corrosive materials are present. drums to direct heat or temperature above o avoid pressurizing and possibly distorting the d not be dispensed by pouring from pail/drum iners containing 5 gallons or more. The use of a recommended for dispensing from pail/drum iners with 5 gallons or more, except for smaller ere adequate ventilation can be used to manage ly labeled containers. well-ventilated place. m direct sunlight. dance with the particular national regulations.
Mate	erials to avoid	: Do not store w Self-reactive su Organic peroxi Oxidizing agen Flammable liqu Flammable sol Pyrophoric liqu Pyrophoric soli Self-heating su Substances an flammable gas Explosives	ith the following product types: ubstances and mixtures des ts uids ids ids ds ubstances and mixtures id mixtures which in contact with water emit



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	er information on stor- tability		nd mixtures with chronic toxicity er tightly closed in a dry and well-ventilated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace c	ontrol parameters
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Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
1,1,1,2-Tetrafluoroethane	811-97-2	TWA	1,000 ppm	US WEEL
Pentafluoroethane	354-33-6	TWA	1,000 ppm	US WEEL
Butane	106-97-8	TWA	800 ppm 1,900 mg/m³	NIOSH REL
		STEL	1,000 ppm	ACGIH

Engineering measures :	Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.	
Personal protective equipmen	t	
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 use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.	
Hand protection		
Remarks :	Take note that the product is extremely cold, which may impact the selection of hand protection. Wash hands before breaks and at the end of workday.	
Eye protection :	Wear the following personal protective equipment: Chemical resistant goggles must be worn. Face-shield	
Skin and body protection :	Skin should be washed after contact.	
Protective measures :	Wear cold insulating gloves/ face shield/ eye protection.	
Hygiene measures :	Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke.	



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				Wash contaminat	ed clothing before re-use.
SEC	TION 9.	PHYSICAL AND CH	EMIC		5
	Appeara	ance	:	Liquefied gas	
	Color		:	colorless	
	Odor		:	slight, ether-like	
	Odor Th	reshold	:	No data available	9
	рН		:	7	
	Melting	point/freezing point	:	No data available	9
	Initial bo range	biling point and boiling	:	-26.7 °F / -32.6 °	С
	Flash p	oint	:	Not applicable	
	Evapora	ation rate	:	Not applicable	
	Flamma	ability (solid, gas)	:	No data available	9
		explosion limit / Upper bility limit	:	Upper flammabili No data available	
		explosion limit / Lower bility limit	:	Lower flammabili No data available	
	Vapor p	pressure	:	6,667 hPa (70.0	°F / 21.1 °C)
				16,403 hPa (129	.9 °F / 54.4 °C)
	Relative	e vapor density	:	No data available	9
	Density		:	1.38 g/cm³ (as liquid)	
	Solubilit Wate	ty(ies) er solubility	:	No data available	9
	Partitior octanol/	n coefficient: n- /water	:	Not applicable	
	Autoign	ition temperature	:	No data available	9
	Decom	position temperature	:	No data available	9
	Viscosit Visc	y osity, kinematic	:	Not applicable	
	Explosiv	ve properties	:	Not explosive	



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C	Oxidiziı	ng properties	:	The substance of	r mixture is not classified as oxidizing.	
F	Particle	e size	:	Not applicable		
SECT	TION 1	0. STABILITY AND RI	EAC	ΤΙVITY		
F	Reactiv	vity	:	Not classified as	a reactivity hazard.	
C	Chemio	cal stability	: Stable if used as directed. Follow precautionary advice and avoid incompatible materials and conditions.			
	Possibi tions	lity of hazardous reac-	:	: Can react with strong oxidizing agents.		
C	Conditi	ons to avoid	:	Heat, flames and	d sparks.	
Ir	Incomp	atible materials	:	Oxidizing agents		
	Hazard product	lous decomposition ts	:	: No hazardous decomposition products are known.		
·		1. TOXICOLOGICAL I	NFC	RMATION		

Information on likely routes of exposure

Inhalation Skin contact Eye contact

Acute toxicity

Not classified based on available information.

Components:

1,1,1,2-Tetrafluoroethane:

Acute inhalation toxicity	: LC50 (Rat): > 567000 ppm Exposure time: 4 h Test atmosphere: gas
	No observed adverse effect concentration (Dog): 40000 ppm Test atmosphere: gas Symptoms: Cardiac sensitization
	Lowest observed adverse effect concentration (Dog): 80000 ppm Test atmosphere: gas Symptoms: Cardiac sensitization
	Cardiac sensitisation threshold limit (Dog): 334,000 mg/m ³ Test atmosphere: gas Symptoms: Cardiac sensitization
Pentafluoroethane:	
Acute inhalation toxicity	: LC0 (Rat): > 800000 ppm



germ

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		Exposure tim Test atmosph Method: OEC	
Buta			70000
Acute	inhalation toxicity	: LC50 (Rat): 5 Exposure tim Test atmosph Remarks: Ba	e: 15 min
Skin	corrosion/irritation		
Not c	lassified based on avai	lable information.	
Com	ponents:		
1,1,1	2-Tetrafluoroethane:		
Spec Resu		: Rabbit : No skin irritat	ion
Com		lable information. : Rabbit : No eye irritati	on
Resp	iratory or skin sensit	ization	
•••••	sensitization lassified based on avai	lable information.	
-	iratory sensitization lassified based on avai	lable information.	
Com	ponents:		
	,2-Tetrafluoroethane:	. Chin contact	
Spec Resu		: Skin contact : Guinea pig : negative	
Spec Resu	ies It	: Rat : negative	
	n cell mutagenicity lassified based on avai	lable information	
	ponents:		
1,1,1	,2-Tetrafluoroethane:		

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Asses	ssment	cell mutager	٦.				
Penta	afluoroethane:						
Genotoxicity in vitro		Method: OE	Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative				
Genotoxicity in vivo		cytogenetic Species: Mo Application I Method: OE	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: inhalation (gas) Method: OECD Test Guideline 474 Result: negative				
Buta	ne:						
Geno	toxicity in vitro		Bacterial reverse mutation assay (AMES) CD Test Guideline 471 ative				
			Chromosome aberration test in vitro CD Test Guideline 473 ative				
Geno	toxicity in vivo	cytogenetic Species: Ra Application I Method: OE Result: nega	t Route: inhalation (gas) CD Test Guideline 474				

Carcinogenicity

Not classified based on available information.

Components:

1,1,1,2-Tetrafluoroethane:

Carcinogenicit ment	 Assess- : Weight of evidence does not support classification as a car- cinogen
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.



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Com	oonents:			
1,1,1,	2-Tetrafluoroethane:			
Repro sessn	oductive toxicity - As- nent	:	Weight of evider reproductive toxi	ice does not support classification for city
Penta	afluoroethane:			
Effect	s on fertility	:	Species: Rat Application Rout Result: negative	generation reproduction toxicity study e: inhalation (vapor) I on data from similar materials
Effect	s on fetal development	:	Species: Rat Application Rout	ryo-fetal development e: inhalation (gas) Fest Guideline 414
Butar	ne:			
Effect	s on fertility	:	reproduction/dev Species: Rat Application Rout	bined repeated dose toxicity study with the velopmental toxicity screening test e: inhalation (gas) Test Guideline 422
Effect	s on fetal development	:	reproduction/dev Species: Rat Application Rout	bined repeated dose toxicity study with the velopmental toxicity screening test e: inhalation (gas) Fest Guideline 422
	-single exposure			
	assified based on availa	ble	information.	
Com	oonents:			
Butar	ne:			

Assessment Remarks	:	May cause drowsiness or dizziness.
Remarks	:	Based on data from similar materials

STOT-repeated exposure

Not classified based on available information.

Components:

1,1,1,2-Tetrafluoroethane:

Assessment	:	No significant health effects observed in animals at concentra-
		tions of 250 ppmV/6h/d or less.



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ated dose toxicity		
oonents:		
2-Tetrafluoroethane	:	
es EL cation Route sure time od arks		
afluoroethane:		
es EL cation Route sure time od	: Rat : >= 50000 pp : inhalation (ga : 13 Weeks : OECD Test (
ne:		
es EL cation Route sure time od	: Rat : >= 9000 ppn : inhalation (g : 6 Weeks : OECD Test	
ation toxicity lassified based on ava	ilable information.	
	10/25/2018 ated dose toxicity <u>conents:</u> 2-Tetrafluoroethane: es EL EL Exation Route sure time od arks afluoroethane: es EL Exation Route sure time od me: es EL Exation Route sure time od me: ation Route sure time od	10/25/20182770442-00002ated dose toxicityconents:2-Tetrafluoroethane:es:RatEL:Sure time:od:

Ecotoxicity

Components:

1,1,1,2-Tetrafluoroethane:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 450 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 980 mg/l Exposure time: 48 h
Toxicity to algae	:	ErC50 (algae): 142 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
		NOEC (Pseudokirchneriella subcapitata (green algae)): 13.2 mg/l Exposure time: 72 h Remarks: Based on data from similar materials



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Penta	fluoroethane:			
Toxicit	ty to fish	:	Exposure time: 96 Method: Directive	hus mykiss (rainbow trout)): 450 mg/l 5 h 67/548/EEC, Annex V, C.1. on data from similar materials
	ty to daphnia and other c invertebrates	:	EC50 (Daphnia magna (Water flea)): 980 mg/l Exposure time: 48 h Method: Directive 67/548/EEC, Annex V, C.2. Remarks: Based on data from similar materials	
Toxici	ty to algae	:	mg/l Exposure time: 72 Method: OECD Te	
			mg/l Exposure time: 72 Method: OECD Te	
II Persis	stence and degradabili	itv		
	onents:	, y		
	2-Tetrafluoroethane:			
	gradability	:	Result: Not readily	/ biodegradable.
Penta	fluoroethane:			
Biode	gradability	:	Result: Not readily Biodegradation: 5 Exposure time: 28 Method: OECD Te	5 %
Butan	e:			
Biode	gradability	:	Result: Readily bi Remarks: Based of	odegradable. on data from similar materials
Bioac	cumulative potential			
<u>Comp</u>	onents:			
Partitio	2-Tetrafluoroethane: on coefficient: n- ol/water	:	log Pow: 1.06	
Partitio	fluoroethane: on coefficient: n- ol/water	:	Pow: 1.48 (77 °F /	/ 25 °C)





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Buta				
	ition coefficient: n- nol/water	: log Pow: 2.89		
	ility in soil lata available			
	er adverse effects lata available			
SECTION	N 13. DISPOSAL CONS	SIDERATIONS		
Disp	oosal methods			
Was	te from residues	: Dispose of in	accordance with local regulations.	
Cont	aminated packaging	· Empty contair	ners should be taken to an approved wast	e

Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.
		Empty pressure vessels should be returned to the supplier. If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name Class Packing group Labels	:	UN 1078 REFRIGERANT GAS, N.O.S. (1,1,1,2-Tetrafluoroethane, Butane) 2.2 Not assigned by regulation 2.2
IATA-DGR UN/ID No. Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft)	:	UN 1078 Refrigerant gas, n.o.s. (1,1,1,2-Tetrafluoroethane, Butane) 2.2 Not assigned by regulation Non-flammable, non-toxic Gas 200
Packing instruction (passen- ger aircraft)	:	200
IMDG-Code UN number Proper shipping name	:	UN 1078 REFRIGERANT GAS, N.O.S. (1,1,1,2-Tetrafluoroethane, Butane)
Class Packing group Labels EmS Code Marine pollutant	:	2.2 Not assigned by regulation 2.2 F-C, S-V no



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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 1078 Refrigerant gases, n.o.s. (1,1,1,2-Tetrafluoroethane, Butane)
Class Packing group Labels ERG Code	:	2.2 Not assigned by regulation NON-FLAMMABLE GAS 126
Marine pollutant	:	no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Gases under pressure
		Simple Asphyxiant

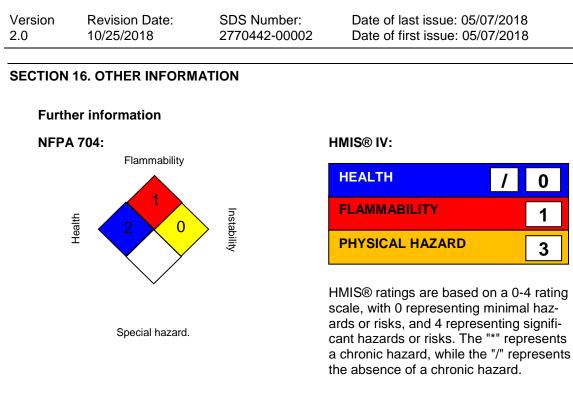
SARA 313	:	This material does not contain any chemical components with
		known CAS numbers that exceed the threshold (De Minimis)
		reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know	
1,1,1,2-Tetrafluoroethane	811-97-2
Pentafluoroethane	354-33-6
Butane	106-97-8
California List of Hazardous Substances	
Butane	106-97-8
California Permissible Exposure Limits for Chemical Contaminants	
Butane	106-97-8



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Before use read Chemours safety information.

For further information contact the local Chemours office or nominated distributors. All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
US WEEL	:	USA. Workplace Environmental Exposure Levels (WEEL)
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
US WEEL / TWA	:	8-hr TWA

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse)



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Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/
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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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