

Vers 8.2	ion	Revision Date: 04/07/2020		0S Number: 28229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017			
SEC	SECTION 1. IDENTIFICATION							
	Product name		:	: VC-20				
	SDS-Identcode		:	13000001241				
	Manufa	acturer or supplier's	deta	iils				
	Compa	ny name of supplier	:	The Chemours C	ompany FC, LLC			
	Address		:	1007 Market Street Wilmington, DE 19801 United States of America (USA)				
	Telephone		•	1-844-773-CHEM (outside the U.S. 1-302-773-1000)				
	Emergency telephone		:	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)				
	Recom	mended use of the c	hen	nical and restriction	ons on use			
	Recommended use		:	Processing aid Curing chemical				
	Restrict	tions on use	:	tions involving im internal body fluid written agreemen	users only. ell Chemours™ materials in medical applica- plantation in the human body or contact with s or tissues unless agreed to by Seller in a t covering such use. For further information, ur Chemours representative.			

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Acute toxicity (Oral)	:	Category 3
Acute toxicity (Inhalation)	:	Category 2
Acute toxicity (Dermal)	:	Category 3
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3

GHS label elements

SAFETY DATA SHEET

VC-20



2	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
Hazard	pictograms		
Signal V	Word	: Danger	
Hazard	Statements	H318 Causes se H330 Fatal if inh	oxic if swallowed or in contact with skin. erious eye damage. aled. e respiratory irritation.
Precaut	tionary Statements	P264 Wash skin P270 Do not eat P271 Use only o P280 Wear proto face protection.	eathe dust/ fume/ gas/ mist/ vapors/ spray. thoroughly after handling. drink or smoke when using this product. butdoors or in a well-ventilated area. ective gloves/ protective clothing/ eye protection iratory protection.
		POISON CENTE P302 + P352 + I ter.Call a POISC P304 + P340 + I and keep comfo CENTER/ docto P305 + P351 + I water for severa and easy to do. CENTER/ docto	P338 + P310 IF IN EYES: Rinse cautiously with I minutes. Remove contact lenses, if present Continue rinsing. Immediately call a POISON r. Ike off immediately all contaminated clothing ar
		Storage: P405 Store lock	ed up.
		Disposal:	f contents/ container to an approved waste dis-
	nazards		

Components

Chemical name	CAS-No.	Concentration (% w/w)
Benzyltriphenylphosphonium chloride	1100-88-5	>= 30 - < 50



/ersion 3.2	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
Limes		1317-65-3	>= 1 - < 5
Actua	I concentration is with	ield as a trade secret	
ECTION	4. FIRST AID MEASU	RES	
Gene	ral advice	vice immediate	accident or if you feel unwell, seek medical ad- ly. Is persist or in all cases of doubt seek medical
lf inha	aled	If breathing is o	ove to fresh air. , give artificial respiration. lifficult, give oxygen. ention immediately.
In cas	se of skin contact	for at least 15 n and shoes. Get medical at Wash clothing	act, immediately flush skin with plenty of water ninutes while removing contaminated clothing rention if symptoms occur. before reuse. an shoes before reuse.
In cas	se of eye contact	for at least 15 r If easy to do, re	act, immediately flush eyes with plenty of water ninutes. emove contact lens, if worn. ention immediately.
lf swa	llowed	so by medical Call a physicia Rinse mouth th	O NOT induce vomiting unless directed to do personnel. In or poison control center immediately. oroughly with water. thing by mouth to an unconscious person.
	important symptoms ffects, both acute and ed	Causes serious Fatal if inhaled	
Prote	ction of first-aiders	and use the re	nders should pay attention to self-protection, commended personal protective equipment atial for exposure exists (see section 8).
Notes	to physician	: Treat symptom	atically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.



Versic 8.2	on	Revision Date: 04/07/2020		9S Number: 28229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017			
	Specific hazards during fire fighting Hazardous combustion prod- ucts Specific extinguishing meth- ods		:	Exposure to combustion products may be a hazard to health.				
			:	Carbon oxides Fluorine compounds Oxides of phosphorus Chlorine compounds Metal oxides 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 so. Evacuate area.				
			:					
	Special protective equipment for fire-fighters		:	In the event of fire Use personal prot	e, wear self-contained breathing apparatus. ective equipment.			
SECT	SECTION 6. ACCIDENTAL RELE		ASE	E MEASURES				
ti	Personal precautions, protec- tive equipment and emer- gency procedures		:	Evacuate personnel to safe areas. Only trained personnel should re-enter the area. Follow safe handling advice and personal protective equipment recommendations.				
E	Environmental precautions		:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillage cannot be contained.				
		s and materials for ment and cleaning up	:	tainer for disposal Local or national r sal of this materia ployed in the clea which regulations Sections 13 and 1	regulations may apply to releases and dispo- I, as well as those materials and items em- nup of releases. You will need to determine			

SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	If sufficient ventilation is unavailable, use with local exhaust ventilation.
Advice on safe handling	:	Do not get on skin or clothing. Do not swallow. Do not get in eyes.



Version 8.2	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017			
		Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as- sessment Keep container tightly closed. Already sensitized individuals should consult their physician regarding working with respiratory irritants or sensitizers. Take care to prevent spills, waste and minimize release to the environment.				
Conditi	ons for safe storage	 Keep in properly labeled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. 				
Materials to avoid		: Do not store with the following product types: Strong oxidizing agents Organic peroxides Flammable liquids Flammable solids Pyrophoric liquids Pyrophoric solids Self-heating substances and mixtures Substances and mixtures which in contact with water emit flammable gases Explosives Gases				

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

:

:

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Limestone	1317-65-3	TWA (total dust)	15 mg/m³	OSHA Z-1
		TWA (respir- able fraction)	5 mg/m³	OSHA Z-1
		TWA (Res- pirable)	5 mg/m ³ (Calcium car- bonate)	NIOSH REL
		TWA (total)	10 mg/m ³ (Calcium car- bonate)	NIOSH REL

Engineering measures

Minimize workplace exposure concentrations. If sufficient ventilation is unavailable, 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



Version 8.2	Revision Date: 04/07/2020		Number: 229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017			
		u F u b d r e v	nknown, approp ollow OSHA resp se NIOSH/MSH/ y air purifying resous chemical is ous chemical is espirator if there xposure levels a	e above recommended limits or are riate respiratory protection should be worn. birator regulations (29 CFR 1910.134) and A approved respirators. Protection provided spirators against exposure to any hazar- imited. Use a positive pressure air supplied is any potential for uncontrolled release, re unknown, or any other circumstance g respirators may not provide adequate			
Hand	protection						
Ma	aterial	: N	litrile rubber				
-	ove thickness earing time	: 0.38 mm : 480 min					
Re	emarks	o a n n v	n the concentrating plications, we replications, we replicate of the afore the afore the annufacturer. Was	protect hands against chemicals depending on specific to place of work. For special ecommend clarifying the resistance to che- ementioned protective gloves with the glove ish hands before breaks and at the end of rough time is not determined for the pro- ves often!			
Eye p			g personal protective equipment: t goggles must be worn. ely to occur, wear:				
Skin a	and body protection	re p S	esistance data an otential. Skin contact must	e protective clothing based on chemical nd an assessment of the local exposure be avoided by using impervious protective aprons, boots, etc).			
Hygie	ene measures	e k V	ye flushing syste ing place. Vhen using do no	mical is likely during typical use, provide ms and safety showers close to the wor- ot eat, drink or smoke. ed clothing before re-use.			

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	pellets
Color	:	white, opaque
Odor	:	slight
Odor Threshold	:	No data available



Vers 8.2	sion	Revision Date: 04/07/2020		S Number: 28229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
	рН		:	No data available	
	Melting	point/freezing point	:	No data available	
	Initial b range	oiling point and boiling	:	No data available	
	Flash p	point	:	Not applicable	
	Evapor	ation rate	:	Not applicable	
	Flamm	ability (solid, gas)	:	No data available	
		explosion limit / Upper bility limit	:	No data available	
		explosion limit / Lower bility limit	:	No data available	
	Vapor p	oressure	:	Not applicable	
	Relative	e vapor density	:	Not applicable	
	Relativ	e density	:	1.5	
	Solubili Wat	ity(ies) er solubility	:	slightly soluble	
	Partitio octanol	n coefficient: n- /water	:	Not applicable	
	Autoigr	nition temperature	:	No data available	
	Decom	position temperature	:	No data available	
	Viscosi Visc	ty cosity, kinematic	:	Not applicable	
	Explosi	ve properties	:	Not explosive	
	Oxidiziı	ng properties	:	The substance or	mixture is not classified as oxidizing.
	Particle	esize	:	No data available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.



Vers 8.2	sion	Revision Date: 04/07/2020		S Number: 28229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
	Possibi tions	lity of hazardous reac-	:	Can react with st	rong oxidizing agents.
	Conditions to avoid		:	None known.	
	Incomp	atible materials	:	Oxidizing agents	
	Hazard product	ous decomposition s	:	No hazardous de	composition products are known.
SEC	CTION 1	1. TOXICOLOGICAL I	NFC	RMATION	
	Informa Skin co Ingestic Eye cor	on	of e	exposure	
		oxicity swallowed or in contac inhaled.	ct wi	th skin.	
	Produc				
	Acute c	oral toxicity	:	Acute toxicity estin Method: Calculation	nate: 131.43 mg/kg on method
	Acute in	nhalation toxicity	:	Acute toxicity estii Exposure time: 4 Test atmosphere: Method: Calculation	n dust/mist
	Acute c	lermal toxicity	:	Acute toxicity estine Method: Calculation	nate: 916.97 mg/kg on method
	Compo	onents:			
	Benzyl	triphenylphosphoniu	m cl	hloride:	
	-	oral toxicity		LD50 (Rat): 43 mg	g/kg
	Acute in	nhalation toxicity	:	LC50 (Rat): 0.130 Exposure time: 4 Test atmosphere:	n
	Acute c	lermal toxicity	:	Acute toxicity estin Method: Expert ju	
	Limest	one:			
	Acute c	oral toxicity	:	icity	
	Acute in	nhalation toxicity	:	LC50 (Rat): > 3 m Exposure time: 4	



rsion	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
		Method: OE Assessment tion toxicity	here: dust/mist CD Test Guideline 403 : The substance or mixture has no acute inhala- ased on data from similar materials
Acute	e dermal toxicity	Method: OE Assessment toxicity	> 2,000 mg/kg CD Test Guideline 402 : The substance or mixture has no acute derma ased on data from similar materials
	corrosion/irritation lassified based on ava	ailable information.	
<u>Com</u>	oonents:		
Benz	yltriphenylphospho	nium chloride:	
Speci Resul		: Rabbit : No skin irrita	tion
Lime	stone:		
Speci		: Rabbit	
Metho			Guideline 404
Resul Rema		: No skin irrita : Based on da	ata from similar materials
Serio	us eye damage/eye	irritation	
Cause	es serious eye damaç	je.	
Com	<u>oonents:</u>		
Benz	yltriphenylphospho		
Speci		: Rabbit	
Resul	IT	: Irreversible e	effects on the eye
Resul	lt	: Toxic by eye	e contact.
Lime	stone:		
Speci	es	: Rabbit	
Resul		: No eye irrita	
Metho			Guideline 405
Rema	arks	: Based on da	ata from similar materials
Resp	iratory or skin sensi	tization	
	sensitization lassified based on ava	ailable information.	
Resp	iratory sensitization		
-	lassified based on available		



ersion .2	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
<u>Com</u> r	oonents:		
Benzy	yltriphenylphospho	nium chloride:	
Test 1		: Maximization T	est
Route Speci	es of exposure	: Skin contact : Guinea pig	
Resul		: negative	
Lime	stone:		
Test 7	51		de assay (LLNA)
	es of exposure	: Skin contact : Mouse	
Speci Metho		: OECD Test Gu	ideline 429
Resul		: negative	
Rema			from similar materials
	cell mutagenicity	- 1 - 1 - 1 - Commenter -	
	assified based on av ponents:	allable information.	
	yltriphenylphospho	onium chloride:	
-	toxicity in vitro		terial reverse mutation assay (AMES) e
Lime	stone:		
Genot	toxicity in vitro	Method: OECD	terial reverse mutation assay (AMES) Test Guideline 471
		Result: negativ Remarks: Base	e d on data from similar materials
			omosome aberration test in vitro Test Guideline 473
		Result: negativ Remarks: Base	e d on data from similar materials
		Method: OECD	tro mammalian cell gene mutation test Test Guideline 476
		Result: negativ Remarks: Base	e d on data from similar materials
Carci	nogenicity		
	assified based on av		
IARC	0		ent at levels greater than or equal to 0.1% is confirmed human carcinogen by IARC.
OSH/		nent of this product pre s list of regulated carcin	sent at levels greater than or equal to 0.1% is ogens.
NTP	No ingred	ient of this product pres	ent at levels greater than or equal to 0.1% is



Version 8.2	Revision Date: 04/07/2020	•-	DS Number: 328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
Not Com	roductive toxicity classified based on avai uponents:	lable	information.	
	estone: cts on fertility	:	reproduction/dev Species: Rat Application Route Method: OECD T Result: negative	oined repeated dose toxicity study with the elopmental toxicity screening test e: Ingestion est Guideline 422 on data from similar materials
Effe	cts on fetal development	t :	reproduction/dev Species: Rat Application Route Method: OECD T Result: negative	bined repeated dose toxicity study with the elopmental toxicity screening test e: Ingestion Test Guideline 422 on data from similar materials

STOT-single exposure

May cause respiratory irritation.

Components:

Benzyltriphenylphosphonium chloride:

Assessment

: May cause respiratory irritation.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Limestone:

Aspiration toxicity

Not classified based on available information.



/ersion 3.2	Revision Date: 04/07/2020		9S Number: 28229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
ECTION	12. ECOLOGICAL INFO	ORN	IATION	
Ecoto	oxicity			
<u>Comp</u>	ponents:			
-	yltriphenylphosphoniu			
	ity to daphnia and other ic invertebrates	:	Exposure time: 48 Method: OECD Te	3 h
Toxici plants	ity to algae/aquatic	:	mg/l Exposure time: 72 Method: OECD Te	
			mg/l Exposure time: 72 Method: OECD To	
Limes	stone:			
Toxici	ity to fish	:	Exposure time: 96 Test substance: V Method: OECD Te	Vater Accommodated Fraction
	ity to daphnia and other ic invertebrates	:	Exposure time: 48 Test substance: V Method: OECD Te	Vater Accommodated Fraction
Toxici plants	ity to algae/aquatic	:	Exposure time: 72 Test substance: V Method: OECD To Remarks: No toxid	Vater Accommodated Fraction
			Exposure time: 72 Test substance: V Method: OECD To Remarks: No toxic	Vater Accommodated Fraction
Toxici	ity to microorganisms	:	EC50: > 100 mg/l Exposure time: 3 Method: OECD To	h



ersion .2	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
		Remarks: Base	d on data from similar materials
Persi	stence and degrada	bility	
<u>Com</u>	ponents:		
Benz	yltriphenylphospho	nium chloride:	
Biode	egradability	Biodegradation Exposure time:	
Bioad	ccumulative potentia	al	
<u>Com</u>	ponents:		
Benz	yltriphenylphospho	nium chloride:	
	ion coefficient: n- ol/water	: log Pow: -0.7	
Mobi	lity in soil		
No da	ata available		
Othe	r adverse effects		
No da	ata available		

Disposal methods

Waste from residues	:	Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG	
UN number	: UN 3464
Proper shipping name	 ORGANOPHOSPHORUS COMPOUND, SOLID, TOXIC, N.O.S. (Benzyltriphenylphosphonium chloride)
Class	: 6.1
Packing group	: III
Labels	: 6.1
IATA-DGR	
UN/ID No.	: UN 3464
Proper shipping name	 Organophosphorus compound, solid, toxic, n.o.s. (Benzyltriphenylphosphonium chloride)
Class	: 6.1



Version 8.2	Revision Date: 04/07/2020		DS Number: 28229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017	
Labe Pack aircra Pack	ing instruction (cargo	: :	III Toxic 677 670		
IMDG-Code UN number Proper shipping name		:	N.O.S.	PHORUS COMPOUND, SOLID, TOXIC,	
Labe EmS	ing group	: : : : : : : : : : : : : : : : : : : :	6.1 III 6.1 F-A, S-A yes		
	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	:	UN 3464
Proper shipping name	:	Organophosphorus compound, solid, toxic, n.o.s. (Benzyltriphenylphosphonium chloride)
Class	:	6.1
Packing group	:	III
Labels	:	TOXIC
ERG Code	:	151
Marine pollutant	:	yes(Benzyltriphenylphosphonium chloride)

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.

		Acute toxicity (any route of exposure) Serious eve damage or eve irritation
		Specific target organ toxicity (single or repeated exposure)



313	known CAS n	does not contain any che umbers that exceed the t Is established by SARA T	threshold (De	e Minimis
to Degulations			,	ion 313.
te Regulations				
ylvania Right To Kı	now			
		Trade secret 1100-88-5 1317-65-3		
nia Prop. 65				
FOA nor is PFOA inte present as an impu	entionally present in t rity at background (e	he product; however, it is nvironmental) levels.		at PFOA
6. OTHER INFORM	ATION			
r information				
704:		HMIS® IV:		
Flammability		HEALTH	1	3
	、 、	FLAMMABILITY		1
	Instability			
	Fluorinated Polyr Benzyltriphenylp Limestone rnia Prop. 65 IING: This product ca is/are known to the S ore information go to FOA nor is PFOA inte e present as an impu rnia Permissible Ex Limestone I6. OTHER INFORM er information 704:	rnia Prop. 65 IING: This product can expose you to cher is/are known to the State of California to c ore information go to www.P65Warnings.c FOA nor is PFOA intentionally present in t e present as an impurity at background (er rnia Permissible Exposure Limits for Cl Limestone I6. OTHER INFORMATION er information 704:	Fluorinated Polymer Benzyltriphenylphosphonium chloride Limestone rnia Prop. 65 IING: This product can expose you to chemicals including pentade is/are known to the State of California to cause birth defects or othe ore information go to www.P65Warnings.ca.gov. Note to User: This FOA nor is PFOA intentionally present in the product; however, it is a present as an impurity at background (environmental) levels. rnia Permissible Exposure Limits for Chemical Contaminants Limestone IG. OTHER INFORMATION Fr information 704: HMIS® IV: Flammability HEALTH	Fluorinated Polymer Trade sect Benzyltriphenylphosphonium chloride 1100-88-5 Limestone 1317-65-3 rnia Prop. 65 IING: This product can expose you to chemicals including pentadecafluoroocta is/are known to the State of California to cause birth defects or other reproduction or information go to www.P65Warnings.ca.gov. Note to User: This product is represent as an impurity at background (environmental) levels. rnia Permissible Exposure Limits for Chemical Contaminants Limestone 1317-65-3 IG. OTHER INFORMATION er information 704: HMIS® IV: Flammability

Special hazard

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Chemours [™] and the Chemours Logo are trademarks of The Chemours Company. Before use read Chemours safety information. For further information contact the local Chemours office or nominated distributors.

Full text of other abbreviations

NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-
		its for Air Contaminants



Version 8.2	Revision Date: 04/07/2020	SDS Number: 1328229-00037	Date of last issue: 09/27/2019 Date of first issue: 02/27/2017
NIOS	H REL / TWA		ed average concentration for up to a 10-hour ng a 40-hour workweek
OSH	A Z-1 / TWA		weighted average
			ances; 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) 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/

Revision Date

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.

04/07/2020



8.2 04/07/2020 1328229-00037 Date of first issue: 02/27/2017	Version	Revision Date:	SDS Number:	Date of last issue: 09/27/2019
	8.2	04/07/2020	1328229-00037	Date of first issue: 02/27/2017

US / Z8