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Version 5.4	Revision Date: 09/12/2020		9S Number: 65565-00009	Date of last issue: 02/21/2020 Date of first issue: 06/23/2017				
SECTION	1. IDENTIFICATION							
Prod	Product name		: Krytox™ GPL 203					
SDS	SDS-Identcode		130000024222					
Man	ufacturer or supplier's	deta	ils					
Com	pany name of supplier	:	The Chemours Co	ompany FC, LLC				
Address : 1007 Market Street Wilmington, DE 198		et 9801 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)					
Reco	ommended use of the c	hen	nical and restriction	ons on use				
Reco	mmended use	:	Lubricant					
Rest	rictions on use	:	tions involving imp internal body fluid written agreemen	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 the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

## **GHS** label elements

Not a hazardous substance or mixture.

## Other hazards

The thermal decomposition vapors of fluorinated plastics may cause polymer fume fever with flulike symptoms in humans, especially when smoking contaminated tobacco.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

## Components

No hazardous ingredients



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SECTION	4. FIRST AID MEASU	RES				
lf inh	If inhaled		emove to fresh air. attention if symptoms occur.			
In ca	In case of skin contact		Wash with water and soap as a precaution. Get medical attention if symptoms occur.			
In ca	In case of eye contact		Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.			
lf sw	If swallowed		If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.			
	t important symptoms effects, both acute and yed	Irritation Lung edema Eye contact Blurred visio Discomfort Lachrymatic	may provoke the following symptoms on			
Prote	ection of first-aiders	: No special p	precautions are necessary for first aid responders.			
Note	Notes to physician		Treat symptomatically and supportively.			

# SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Not applicable Will not burn
Unsuitable extinguishing media	:	Not applicable Will not burn
Specific hazards during fire fighting	:	Exposure to combustion products may be a hazard to health.
Hazardous combustion prod- ucts	:	Hydrogen fluoride carbonyl fluoride potentially toxic fluorinated compounds aerosolized particulates Carbon oxides
Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances 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.



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Special protective equipment for fire-fighters		:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.		
SECTION	6. ACCIDENTAL RELE	ASI	EMEASURES		
tive e	onal precautions, protec- quipment and emer- y procedures	:		lling advice (see section 7) and personal pro- tt recommendations (see section 8).	
Envir	onmental precautions	:	the environment. eakage or spillage if safe to do so. se of contaminated wash water. should be advised if significant spillages ned.		
	ods and materials for inment and cleaning up	:	For large spills, p ment to keep ma pumped, store re Clean up remain bent. Local or national sal of this materia ployed in the clea which regulations Sections 13 and	rt absorbent material. provide diking or other appropriate contain- terial from spreading. If diked material can be covered material in appropriate container. ing materials from spill with suitable absor- regulations may apply to releases and dispo al, as well as those materials and items em- anup of releases. You will need to determine s are applicable. 15 of this SDS provide information regarding ational requirements.	

# SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as- sessment Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	:	Keep in properly labeled containers. Store in accordance with the particular national regulations.
Materials to avoid	:	No special restrictions on storage with other products.
Further information on stor- age stability	:	No decomposition if stored and applied as directed.



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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

## Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Hydrofluoric acid	7664-39-3	TWA	3 ppm 2.5 mg/m <sup>3</sup>	NIOSH REL
		С	6 ppm 5 mg/m³	NIOSH REL
		TWA	3 ppm	OSHA Z-2
		TWA	0.5 ppm (Fluorine)	ACGIH
		С	2 ppm (Fluorine)	ACGIH
Carbonyl difluoride	353-50-4	TWA	2 ppm	ACGIH
		STEL	5 ppm	ACGIH
		ST	5 ppm 15 mg/m³	NIOSH REL
		TWA	2 ppm 5 mg/m <sup>3</sup>	NIOSH REL
Carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	OSHA Z-1
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	NIOSH REL
		ST	30,000 ppm 54,000 mg/m <sup>3</sup>	NIOSH REL
Carbon monoxide	630-08-0	TWA	25 ppm	ACGIH
		TWA	35 ppm 40 mg/m <sup>3</sup>	NIOSH REL
		С	200 ppm 229 mg/m <sup>3</sup>	NIOSH REL
		TWA	50 ppm 55 mg/m <sup>3</sup>	OSHA Z-1

**Engineering measures** 

Processing may form hazardous compounds (see section 10).

Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

## Personal protective equipment

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Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are



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		Follow OSH use NIOSH, by air purify dous chemi respirator if exposure le	ppropriate respiratory protection should be worn. A respirator regulations (29 CFR 1910.134) and /MSHA approved respirators. Protection provided ing respirators against exposure to any hazar- cal is limited. Use a positive pressure air supplied there is any potential for uncontrolled release, vels are unknown, or any other circumstance urifying respirators may not provide adequate
Hand	d protection		
R	emarks	: Wash hand	s before breaks and at the end of workday.
Eye p	protection	: Wear the fo Safety glass	llowing personal protective equipment: ses
Skin	and body protection	: Skin should	be washed after contact.
Hygie	ene measures	eye flushing king place. When using	to chemical is likely during typical use, provide g systems and safety showers close to the wor- g do not eat, drink or smoke. Iminated clothing before re-use.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Grease
Color	:	white
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	7
Melting point/freezing point	:	608 °F / 320 °C
Initial boiling point and boiling range	:	No data available
Flash point	:	Method: Pensky-Martens closed cup Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Will not burn
Upper explosion limit / Upper	:	No data available



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	flamma	bility limit			
		explosion limit / Lower bility limit	:	No data available	
	Vapor p	pressure	:	Not applicable	
	Relative	e vapor density	:	Not applicable	
	Relative	e density	:	1.89 - 1.93	
	Solubili Wat	ty(ies) er solubility	:	insoluble	
	Partition octanol	n coefficient: n- /water	:	Not applicable	
	Autoign	ition temperature	:	No data available	)
	Decom	position temperature	:	572 °F / 300 °C	
	Viscosi <sup>.</sup> Visc	ty osity, kinematic	:	Not applicable	
	Explosi	ve properties	:	Not explosive	
	Oxidizir	ng properties	:	The substance of	r mixture is not classified as oxidizing.
	Particle	size	:	No data available	)

# SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	Hazardous decomposition products will be formed at elevated temperatures.
Conditions to avoid	:	None known.
Incompatible materials	:	None.

# Hazardous decomposition products Thermal decomposition Hvd

hermal decomposition	:	Hydrofluoric acid
-		Carbonyl difluoride
		Carbon dioxide
		Carbon monoxide

# SAFETY DATA SHEET

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	11. TOXICOLOGIC	AL INFORMATION	
	mation on likely rou	tes of exposure	
Inges Eye c	tion contact		
Acute	e toxicity		
Not cl	lassified based on av	ailable information.	
Skin	corrosion/irritation		
Not cl	lassified based on av	ailable information.	
	us eye damage/eye		
Not cl	lassified based on av	ailable information.	
Resp	iratory or skin sens	itization	
Skin	sensitization		
Not cl	lassified based on av	ailable information.	
Resp	iratory sensitizatior	1	
Not cl	lassified based on av	ailable information.	
Germ	cell mutagenicity		
Not cl	lassified based on av	ailable information.	
Carci	nogenicity		
Not cl IARC		ent of this product prese	ent at levels greater than or equal to 0.1% is confirmed human carcinogen by IARC.
OSH/		nent of this product pres s list of regulated carcin	sent at levels greater than or equal to 0.1% ogens.
NTP			ent at levels greater than or equal to 0.1% is d carcinogen by NTP.

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Not classified based on available information.

## STOT-single exposure

Not classified based on available information.

#### STOT-repeated exposure

Not classified based on available information.

## Aspiration toxicity

Not classified based on available information.

# **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity No data available



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		tence and degradabi	lity		
		a available			
		<b>cumulative potential</b> a available			
		<b>ty in soil</b> a available			
	Other	adverse effects			
	No dat	a available			
SEC	TION 1	3. DISPOSAL CONSI	DEF	RATIONS	
	-	sal methods			
	Waste	from residues	:	Dispose of in acc	ordance with local regulations.
	Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.				recycling or disposal.
				If not otherwise s	pecified: Dispose of as unused product.
SEC		4. TRANSPORT INFO	ORM		
020					
	Interna	ational Regulations			
	UNRT Not reg	<b>DG</b> gulated as a dangerous	s go	od	
	IATA-I	-			
	Not reo	gulated as a dangerous	s go	od	

#### IMDG-Code

Not regulated as a dangerous good

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

Not regulated as a dangerous good

# SECTION 15. REGULATORY INFORMATION

## **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 : No SARA Hazards



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SARA	313	known	CAS numb	s not contain any chemical con pers that exceed the threshold stablished by SARA Title III, S	l (De Minimis)
US Sta	ate Regulations				
Penns	ylvania Right To Kno	w			
	PFPE fluid			Trade s	
	Fluoropolymer			Trade s	secret
<b>California Prop. 65</b> WARNING: This product can expose you to chemicals including Pentadecafluorooctanoic acid, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. Note to User: This product is not made with PFOA nor is PFOA intentionally present in the product; however, it is possible that PFOA may be present as an impurity at background (environmental) levels.					

## SECTION 16. OTHER INFORMATION

#### **Further information** NFPA 704: HMIS® IV: Flammability HEALTH 0 FLAMMABILITY 0 Health Instability 0 0 PHYSICAL HAZARD 0 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 Special hazard a chronic hazard, while the "/" represents the absence of a chronic hazard.

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For further information contact the local Chemours office or nominated distributors.

Full text o	of other	abbreviations
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ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
OSHA Z-2	:	USA. Occupational Exposure Limits (OSHA) - Table Z-2



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ACGIH / TWA ACGIH / STEL			ne-weighted average n exposure limit		
ACGI		•	: Ceiling limit		
NIOSP	HREL/TWA	•	<ul> <li>Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek</li> </ul>		
NIOSH	HREL/ST	: STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday			
NIOSH	HREL/C	: Ceiling va	lue not be exceeded at any time.		
	Z-1 / TWA		e weighted average		
OSHA	Z-2 / TWA	: 8-hour tim	e weighted average		

AIIC - Australian Inventory of Industrial Chemicals; 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	:	09/12/2020

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



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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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