according to the OSHA Hazard Communication Standard



# Krytox™ GPL 203

Version 6.2	Revision Date: 11/02/2023	SDS Numb 1765565-0		Date of last issue: 04/14/2023 Date of first issue: 06/23/2017				
SECTIO	SECTION 1. IDENTIFICATION							
Proc	Product name		™ GPL 20	3				
SDS	S-Identcode	: 13000	13000024222					
Mar	ufacturer or supplier's	etails						
Con	pany name of supplier	: The Ch	emours C	ompany FC, LLC				
Address			1007 Market Street Wilmington, DE 19801 United States of America (USA)					
Tele	phone	: 1-844-7	1-844-773-CHEM (outside the U.S. 1-302-773-1000)					
Emergency telephone		773-20	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)					
Rec	ommended use of the c	emical and	d restriction	ons on use				
Rec	Recommended use		Lubricant					
Restrictions on use :		Do not tions in interna written	volving im body fluic agreemen	only. ell Chemours™ materials in medical applica- plantation in the human body or contact with ls or tissues unless agreed to by Seller in a t covering such use. For further information, our 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

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

#### 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 MEASURES						
If inhaled	:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.				
In case of skin contact	:	Wash with water and soap as a precaution. Get medical attention if symptoms occur.				
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.				
If swallowed	:	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	:	Inhalation may provoke the following symptoms: Irritation Lung edema Eye contact may provoke the following symptoms Blurred vision Discomfort Lachrymation Skin contact may provoke the following symptoms: Irritation Redness Inhalation may provoke the following symptoms: Irritation Shortness of breath				
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	:	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-	:	Use extinguishing measures that are appropriate to local cir-

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ods		cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe so. Evacuate area.			
Special protective equipment for fire-fighters		:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.		

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).
Environmental precautions	:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. 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	:	Soak up with inert absorbent material. For large spills, provide diking or other appropriate contain- ment 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 absor- bent. Local or national regulations may apply to releases and dispo- sal of this material, as well as those materials and items em- ployed 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 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. Do not breathe decomposition products.
Conditions for safe storage	:	

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Furth	rials to avoid er information on stor- tability	·	ctions on storage with other products. on if stored and applied as directed.

#### 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
Hydrogen fluoride	7664-39-3	TWA	0.5 ppm (Fluorine)	ACGIH
		С	2 ppm (Fluorine)	ACGIH
		С	6 ppm 5 mg/m³	NIOSH REL
		TWA	3 ppm 2.5 mg/m <sup>3</sup>	NIOSH REL
		TWA	3 ppm	OSHA Z-2
Carbonyl difluoride	353-50-4	TWA	2 ppm	ACGIH
		STEL	5 ppm	ACGIH
		TWA	2 ppm 5 mg/m <sup>3</sup>	NIOSH REL
		ST	5 ppm 15 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>	NIOSH REL
		ST	30,000 ppm 54,000 mg/m <sup>3</sup>	NIOSH REL
		TWA	5,000 ppm 9,000 mg/m <sup>3</sup>	OSHA Z-1
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/m³	OSHA Z-1

Engineering measures

Processing may form hazardous compounds (see section 10).

:

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				te ventilation, especially in confined areas. lace exposure concentrations.	
Perso	onal protective equip	ment			
Resp	Respiratory protection		General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Wh concentrations are above recommended limits or are unknown, appropriate respiratory protection should be wo Follow OSHA respirator regulations (29 CFR 1910.134) a use NIOSH/MSHA approved respirators. Protection provide by air purifying respirators against exposure to any hazar- dous chemical is limited. Use a positive pressure air supp 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				
Re	Remarks Eye protection		Wash hands be	fore breaks and at the end of workday.	
Eye p			Wear the follow Safety glasses	ring personal protective equipment:	
Skin a	and body protection	:	Skin should be	washed after contact.	
Hygie	ene measures	:	eye flushing sys king place. When using do	hemical is likely during typical use, provide stems and safety showers close to the wor- not eat, drink or smoke. ated 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

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	Flash p	point	:	Method: Pensky- Not applicable	Martens closed cup
	Evapor	ation rate	:	Not applicable	
	Flamm	ability (solid, gas)	:	Will not burn	
		explosion limit / Upper ability limit	:	No data available	9
		explosion limit / Lower ability limit	:	No data available	9
	Vapor	oressure	:	Not applicable	
	Relativ	e vapor density	:	Not applicable	
	Relativ	e density	:	1.89 - 1.93	
	Solubil Wat	ity(ies) ter solubility	:	insoluble	
	Partitio octano	n coefficient: n- l/water	:	Not applicable	
	Autoigr	nition temperature	:	No data available	9
	Decom	position temperature	:	572 °F / 300 °C	
	Viscosi Visc	ty cosity, kinematic	:	Not applicable	
	Explos	ive properties	:	Not explosive	
		ng properties	:		r mixture is not classified as oxidizing.
	Particle	e size	:	No data available	9

### 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.

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Incom	npatible materials	: None.	
Haza	rdous decompositio	n products	
Thern	nal decomposition	: Hydrogen fluor Carbonyl difluo Carbon dioxide Carbon monox	oride e

#### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Skin contact Ingestion Eye contact

#### Acute toxicity

Not classified based on available information.

#### Skin corrosion/irritation

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

- **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.

#### STOT-single exposure

Not classified based on available information.

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#### 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 Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Other adverse effects No data available

#### SECTION 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues	:	Dispose of in accordance with local regulations. Do not dispose of waste into sewer.
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** Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

#### 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

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Special precautions for user

Not applicable

#### **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
SARA 311/312 Hazards	: No SARA Hazards

:

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

PFPE fluid Fluoropolymer Trade secret Trade secret

#### California Prop. 65

WARNING: This product can expose you to chemicals including Pentadecafluorooctanoic acid, which is/are known to the State of California to cause cancer, and Carbon monoxide, 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.

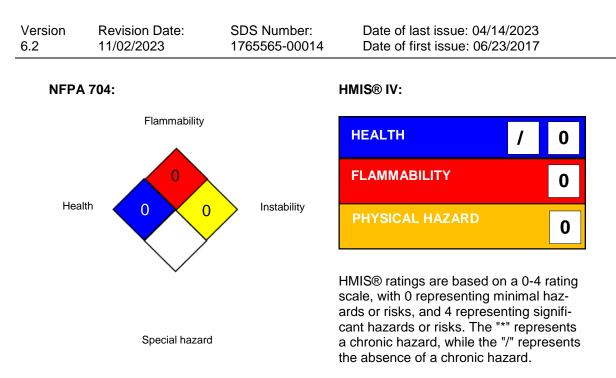
#### **SECTION 16. OTHER INFORMATION**

**Further information** 

according to the OSHA Hazard Communication Standard



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

#### Full text of other abbreviations

ACGIH NIOSH REL OSHA Z-1	:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
OSHA Z-2	:	USA. Occupational Exposure Limits (OSHA) - Table Z-2
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
ACGIH / C	:	Ceiling limit
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
NIOSH REL / C OSHA Z-1 / TWA OSHA Z-2 / TWA	:	Ceiling value not be exceeded at any time. 8-hour time weighted average 8-hour time 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

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- 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; TECI - Thailand Existing Chemicals 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	:	Internal technical data, data from raw material SDSs, OECD
compile the Material Safety Data Sheet		eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/

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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



Ref:	130000024222
Revision date:	12/29/2023
Version	1.0

# **TRI Supplier Notification for Chemicals of Special Concern**

#### Product name: **Krytox™ GPL 203**

This letter is to inform you that the product listed above that we sell to you contains the following chemical(s) subject to section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). We are required to notify you of the presence of these chemicals in the product under EPCRA section 313. This law requires certain industrial facilities to report on annual emissions and other waste management of specified EPCRA section 313 chemicals and chemical categories. Chemicals of Special Concern are a subpart listing of chemicals and compounds subject to the Supplier Notification Requirements in 40 C.F.R. 372.45. The chemical(s) listed below may not be intentionally present in the product; however, it is possible that these chemical(s) may be present as an impurity and the exact concentration may vary between batches.

Chemical name	CAS No.	Value	Unit	Test Method
Hexafluoropropylene oxide dimer acid	13252-13-6	< 460	PPB	Chemours Extraction SOP*
Perfluorobutanoic acid	375-22-4	< 3	PPB	Chemours Extraction SOP*

\*Chemours SOP for Extraction of Residuals from Fluoropolymer Matrices. <u>https://www.chemours.com/en/-</u> /media/files/corporate/sop-residual-extractions-from-fluoropolymer-matrices.pdf

The data above is based on the best readily available information as of the date of this letter, which may include representative samples of products. This information is supplemental to safety and regulatory information provided on the SDS. The content of this letter is confidential and intended for the recipient to use for regulatory purposes only.

Please note that if you repackage or otherwise redistribute this product to certain industrial customers as per 40 CFR 372.45(a)(3)(ii), a notice similar to this one should be sent to those customers.

If you have any questions or concerns, please reach out to your account manager.

#### Disclaimer:

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