

## Krytox<sup>™</sup> GPL 206

Versio 6.0	n Revision Da 11/07/2018		DS Number: 65206-00007	Date of last issue: 10/11/2018 Date of first issue: 06/23/2017		
SECTI	ON 1. IDENTIFICA					
Pi	roduct name	:	Krytox™ GPL 206	3		
Pi	roduct code	:	D12340486			
S	DS-Identcode	:	130000031500			
м	anufacturer or su	pplier's deta	ails			
C	ompany name of s	upplier :				
A	Address		1007 Market Street Wilmington, DE 19899 United States of America (USA)			
Те	Telephone		1-844-773-CHEM (outside the U.S. 1-302-773-1000)			
E	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)			
R	ecommended use	of the chen	nical and restriction	ons on use		
R	ecommended use	:	Lubricant			
R	estrictions on use	:	tions involving imp internal body fluid written agreemen	only. ell Chemours™ materials in medical applica- blantation 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

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 inha	aled	:	If inhaled, remove Get medical atter	e to fresh air. ition 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.		
lf swa	allowed	:	Get medical atter	NOT induce vomiting. tion if symptoms occur. oughly 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		
Prote	ction of first-aiders	:	No special preca	utions are necessary for first aid responders.	
Notes	s to physician	:	Treat symptomati	cally 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.		
SEC	TION 6.	ACCIDENTAL RELE	ASE	E MEASURES	
	tive equ	al precautions, protec- ipment and emer- procedures	:	Follow safe handli equipment recomi	ng advice and personal protective nendations.
	Environ	mental precautions	:	Prevent further lea Retain and dispos	e environment must be avoided. akage or spillage if safe to do so. e of contaminated wash water. hould be advised if significant spillages ed.
Methods and materials for containment and cleaning up		:	For large spills, pr containment to ke can be pumped, s container. Clean up remainin absorbent. Local or national r disposal of this ma employed in the c determine which r Sections 13 and 1	absorbent material. ovide diking or other appropriate ep material from spreading. If diked material tore recovered material in appropriate ng materials from spill with suitable egulations may apply to releases and aterial, as well as those materials and items leanup of releases. You will need to egulations are applicable. 5 of this SDS provide information regarding tional 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 assessment 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	TŴA	3 ppm 2.5 mg/m <sup>3</sup>	NIOSH REL
		С	6 ppm 5 mg/m <sup>3</sup>	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

:

:

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 OSHA res use NIOSH/MSH by air purifying re hazardous chemi supplied respirato release, exposure	riate respiratory protection should be worn. pirator regulations (29 CFR 1910.134) and A approved respirators. Protection provided spirators against exposure to any cal is limited. Use a positive pressure air or if there is any potential for uncontrolled e levels are unknown, or any other ere air purifying respirators may not provide ion.
Hand	I protection			
R	emarks	:	Wash hands befo	ore breaks and at the end of workday.
Eye p	protection	:	Wear the followin Safety glasses	g personal protective equipment:
Skin	and body protection	:	Skin should be w	ashed after contact.
Hygie	ene measures	:	located close to the When using do not	lushing systems and safety showers are he working place. ot eat, drink or smoke. red 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 flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available



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Vap	oor pressure	:	Not applicable	
Rel	ative vapor density	:	Not applicable	
Rel	ative density	:	1.89 - 1.93 (75 °	F / 24 °C)
	Solubility(ies) Water solubility		insoluble	
	tition coefficient: n- anol/water	:	Not applicable	
Aut	Autoignition temperature		No data availabl	e
Dec	Decomposition temperature		572 °F / 300 °C	
	cosity Viscosity, kinematic	:	Not applicable	
Exp	losive properties	:	Not explosive	
Oxi	Oxidizing properties		The substance of	r mixture is not classified as oxidizing.
Par	ticle size	:	No data availabl	e

## 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 put Thermal decomposition	rod :	

Carbonyl difluoride Carbon dioxide Carbon monoxide

## SECTION 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

Skin contact Ingestion Eye contact



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		toxicity								
	Not classified based on available information.									
	Skin corrosion/irritation									
	Not classified based on available information.									
		s eye damage/eye i ssified based on ava								
		atory or skin sensit								
	•	ensitization								
		ssified based on ava	ilable information.							
	Respir	atory sensitization								
	Not cla	ssified based on ava	ilable information.							
	Germ	cell mutagenicity								
	Not classified based on available information.									
		ogenicity								
	Not cla		nt of this product prese	ent at levels greater than or equal to 0.1% is confirmed human carcinogen by IARC.						
	<b>OSHA</b> No component of this product present at levels greater than or equal to 0.1 on OSHA's list of regulated carcinogens.									
	<b>NTP</b> 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.									
		single exposure								
		ssified based on ava	ilable information.							
		repeated exposure	ilabla information							
		ssified based on ava	liable 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



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Other adverse effects No data available					
SECTION 13. DISPOSAL CONSIDERATIONS					
Disposal methods					
Waste	e from residues	:	Dispose of in accordance with local regulations.		
Conta	aminated 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

## **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	:	No SARA Hazards
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# 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



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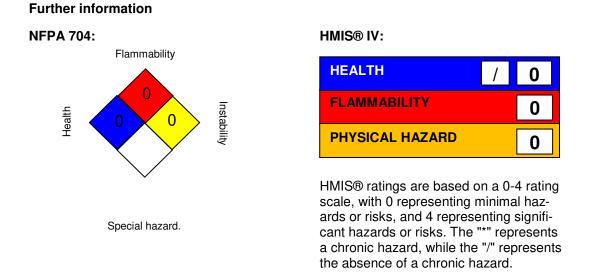
Version	Revision Date: 11/07/2018	SDS Number:	Date of last issue: 10/11/2018
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	DEDE fluid		Trada soorat

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 birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

## **SECTION 16. OTHER INFORMATION**



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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 o	of other	abbreviations
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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	:	Ceiling value not be exceeded at any time.
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-2 / TWA	:	8-hour time weighted average



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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) 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	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-
Data Sheet		cy, 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.



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