

Version 11.0	Revision Date: 11/08/2022	-	OS Number: 31355-00046	Date of last issue: 03/22/2022 Date of first issue: 02/27/2017	
SECTIO	N 1. IDENTIFICATION				
Pro	duct name	:	Krytox™ TM7		
Pro	duct code	:	D12437371		
SD	S-Identcode	:	130000027831		
Ma	nufacturer or supplier's	deta	ails		
	npany name of supplier	:			
Ado	Address		1007 Market Street Wilmington, DE 19801 United States of America (USA)		
Tele	Telephone		1-844-773-CHEM (outside the U.S. 1-302-773-1000)		
Em	Emergency telephone		Medical emergency: 1-866-595-1473 (outside the U.S. 1-302 773-2000) ; Transport emergency: +1-800-424-9300 (outsid the U.S. +1-703-527-3887)		
Red	commended use of the c	hen	nical and restriction	ons on use	
Red	commended use	:	Lubricant		
Res	strictions on use	:	tions involving im 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 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 MEASUF	RES					
lf inha	aled	:	If inhaled, remo Get medical att	ove to fresh air. ention if symptoms occur.			
In cas	se of skin contact	:	Wash with water and soap as a precaution. Get medical attention if symptoms occur.				
In cas	In case of eye contact		Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.				
If swallowed		:	Get medical att	O NOT induce vomiting. ention if symptoms occur. oroughly with water.			
Most important symptoms and effects, both acute and delayed		:	Polymer fume f Skin contact ma Redness Eye contact ma Blurred vision Discomfort Lachrymation	ay provoke the following symptoms: by provoke the following symptoms provoke the following symptoms:			
Prote	ction of first-aiders	:	No special prec	autions are necessary for first aid responders			
Notes to physician		:	Treat symptom	atically 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 Metal oxides Nitrogen oxides (NOx)
Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.

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					o cool unopened containers. ged containers from fire area if it is safe to do		
Special protective equipment : for fire-fighters			:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.			
SECTIO	ON 6.	ACCIDENTAL RELE	ASI	E MEASURES			
tive	e equ	al precautions, protec- ipment and emer- rocedures	:		ing advice (see section 7) and personal pro- recommendations (see section 8).		
En	nviron	mental precautions	:	Retain and dispos	akage or spillage if safe to do so. se of contaminated wash water. should be advised if significant spillages		
		s and materials for ment and cleaning up	:	For large spills, pr ment to keep mat pumped, store red Clean up remainin bent. Local or national n sal of this materia ployed in the clea which regulations Sections 13 and 1	absorbent material. Tovide diking or other appropriate contain- erial from spreading. If diked material can be covered material in appropriate container. In materials from spill with suitable absor- regulations may apply to releases and dispo- I, as well as those materials and items em- nup of releases. You will need to determine 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	:	Do not breathe decomposition products.
		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.

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Further information on stor- : age stability

No decomposition 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/m³	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).

Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Dust formation may be relevant in the processing of this pro-

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		ons have vant Reg fract solu	of concentra to be cons limits includ ulated of 15 ion; and AC ble) Not Oth	to substance-specific OELs, general limitati- ations of particulates in the air at workplaces idered in workplace risk assessment. Rele- de: OSHA PEL for Particulates Not Otherwise mg/m3 - total dust, 5 mg/m3 - respirable GIH TWA for Particles (insoluble or poorly herwise Specified of 3 mg/m3 - respirable /m3 - inhalable particles.
Perso	onal protective equip	ment		
	ratory protection	: Gen mair conc unkr Follo use by a dous resp expo whe	ntain vapor e centrations a nown, appro ow OSHA re NIOSH/MSI ir purifying r s chemical is irator if ther osure levels	al exhaust ventilation is recommended to exposures below recommended limits. Where are above recommended limits or are priate respiratory protection should be worn. espirator regulations (29 CFR 1910.134) and HA approved respirators. Protection provided respirators against exposure to any hazar- s limited. Use a positive pressure air supplied e is any potential for uncontrolled release, are unknown, or any other circumstance ng respirators may not provide adequate
Hand	protection			
Re	emarks	: Was	h hands be	fore breaks and at the end of workday.
Еуе р	rotection		r the followi ty glasses	ng personal protective equipment:
Skin a	and body protection	: Skin	should be v	washed after contact.
Hygie	ne measures	eye king Whe	flushing sys place. en using do i	nemical is likely during typical use, provide tems 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

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	Melting	point/freezing point	:	No data available	
	Initial bo range	piling point and boiling	:	No data available	
	Flash p	oint	:	Not applicable	
	Evapora	ation rate	:	Not applicable	
	Flamma	ability (solid, gas)	:	Will not burn	
		explosion limit / Upper bility limit	:	No data available	
		explosion limit / Lower bility limit	:	No data available	
	Vapor p	pressure	:	Not applicable	
	Relative	e vapor density	:	Not applicable	
	Relative	e density	:	1.9	
	Solubilit Wate	ty(ies) er solubility	:	No data available	
	Partitior octanol/	n coefficient: n- /water	:	Not applicable	
	Autoign	ition temperature	:	No data available	
	Decom	position temperature	:	572 °F / 300 °C	
	Viscosit Visc	y osity, kinematic	:	Not applicable	
	Explosiv	ve properties	:	Not explosive	
	Oxidizin	ng properties	:	The substance or	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.



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Incom	patible materials	: None.	
	dous decomposition	<b>products</b> : Hydrogen fluor	ide
	•	Carbonyl difluc Carbon dioxide	ride
		Carbon monox	ide

## 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.

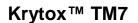
## **Reproductive toxicity**

Not classified based on available information.

#### STOT-single exposure

Not classified based on available information.

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ST	OT-repeated exposure					
Not	Not classified based on available information.					
As	Aspiration toxicity					
Not	Not classified based on available information.					
SECTION 12. ECOLOGICAL INFORMATION						
Ea						
	otoxicity data available					
	No data available					
	Persistence and degradability					
	No data available					
	Bioaccumulative potential					
No	No data available					
Мо	Mobility in soil					
No	No data available					
Oth	Other adverse effects					
No	No data available					
SECTIO	ON 13. DISPOSAL CONSI	DERATIONS				

#### **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

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

#### Special precautions for user

Not applicable



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### 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 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 Additive Trade secret Trade secret Trade secret

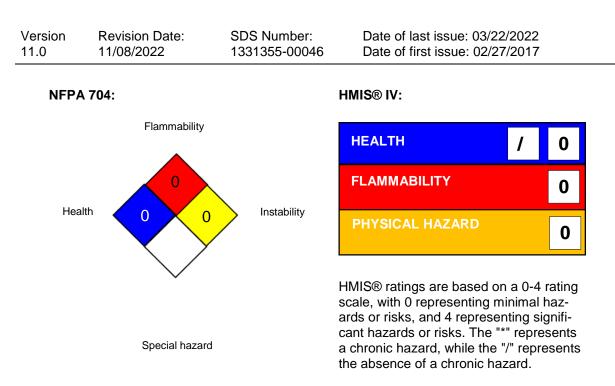
#### California Prop. 65

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





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

#### Full text of other abbreviations

:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
:	USA. Occupational Exposure Limits (OSHA) - Table Z-2
	8-hour, time-weighted average
:	Short-term exposure limit
:	Ceiling limit
:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
:	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 - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals



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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 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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