

Krytox[™] GPL 215

Vers 1.1	sion	Revision Date: 22.08.2019	-	S Number: 6918-00002	Date of last issue: 05.07.2019 Date of first issue: 05.07.2019			
1. P	RODUC	T AND COMPANY IDI	ENT	IFICATION				
	Produc	t name	:	Krytox™ GPL 21	5			
	SDS-Id	entcode	:	130000031505				
	Manufa	acturer or supplier's c	letai	ls				
	Compa	ny	:	Chemours Nethe	rlands B.V.			
	Addres	S	:	Baanhoekweg 22 3313 LA Dordrec				
	Telepho	one	:	+31-(0)-78-630-1	011			
	Emerge	ency telephone number	r:	+(44)-870-82004	18 (CHEMTREC - Recommended)			
	E-mail	address	:	sds-support@che	emours.com			
	Telefax		:	+31-78-6163737				
	Recom	mended use of the cl	hemi	ical and restrictic	ons on use			
	Recom	mended use	:	Lubricant				
	Restric	tions on use	:	tions involving im internal body fluid written agreemen	e only. sell Chemours™ materials in medical applica- plantation in the human body or contact with ds or tissues unless agreed to by Seller in a nt covering such use. For further information, our Chemours representative.			

2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

The thermal decomposition vapours of fluorinated plastics may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

No hazardous ingredients



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4. FIRS	AID MEASURES			
lf ir	haled	:	If inhaled, remove Get medical atten	to fresh air. tion if symptoms occur.
In c	ase of skin contact	:		and soap as a precaution. tion if symptoms occur.
In c	case of eye contact	:		ater as a precaution. tion if irritation develops and persists.
lf s'	wallowed	:		NOT induce vomiting. tion if symptoms occur. bughly with water.
and	st important symptoms I effects, both acute and ayed	:	Irritation Lung oedema Eye contact may p Blurred vision Discomfort Lachrymation	ovoke the following symptoms: provoke the following symptoms provoke the following symptoms:
Pro	tection of first-aiders	:	No special precau	tions are necessary for first aid responders.
Not	es to physician	:	Treat symptomation	cally and supportively.
5. FIRE	FIGHTING MEASURES			
Sui	table extinguishing media	:	Not applicable Will not burn	
Un: me	suitable extinguishing dia	:	Not applicable Will not burn	
	ecific hazards during fire- ting	:	Exposure to comb	oustion products may be a hazard to health.
Ha: uct	zardous combustion prod- s	:	Hydrogen fluoride carbonyl fluoride potentially toxic flu aerosolized partic Carbon oxides Metal oxides Sulphur oxides	uorinated compounds
Spe ods	ecific extinguishing meth-	:	cumstances and t Use water spray t	measures that are appropriate to local cir- he surrounding environment. o cool unopened containers. ged containers from fire area if it is safe to do



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			Evacuate area.	
	ecial protective equipment firefighters	:	essary.	ined breathing apparatus for firefighting if neo otective equipment.
6. ACC	IDENTAL RELEASE MEA	SUF	RES	
tiv	rsonal precautions, protec- e equipment and emer- ncy procedures	• :	Follow safe han ment recommer	dling advice and personal protective equip- idations.
Er	Environmental precautions : Discharge into the environment must be average of prevent further leakage or spillage if safe to Retain and dispose of contaminated wash w Local authorities should be advised if signific cannot be contained.			
Methods and materials for containment and cleaning up			For large spills, ment to keep ma be pumped, stor Clean up remain bent. Local or nationa posal of this ma employed in the mine which regu Sections 13 and	ert absorbent material. provide dyking or other appropriate contain- aterial from spreading. If dyked material can re recovered material in appropriate containe ning materials from spill with suitable absor- l regulations may apply to releases and dis- terial, as well as those materials and items cleanup of releases. You will need to deter- lations are applicable. 15 of this SDS provide information regarding national requirements.

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 labelled 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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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components 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	0.5 ppm (Fluorine)	ACGIH			
		С	2 ppm (Fluorine)	ACGIH			
Carbonyl difluoride	353-50-4	TWA	2 ppm	ACGIH			
		STEL	5 ppm	ACGIH			
Carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH			
		STEL	30,000 ppm	ACGIH			
Carbon monoxide	630-08-0	TWA	25 ppm	ACGIH			
Engineering measures Personal protective equipm	Ensure adeo Minimize wo	quate ventilation, orkplace exposur	lous compounds (see , especially in confined e concentrations.	areas.			
Respiratory protection : If adequate local exhaust ventilation is not available or ex sure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.							
Filter type	: Combined p type	Combined particulates, acidic gas/vapour and organic vapour type					
Hand protection							
Remarks	: Wash hands	s before breaks a	and at the end of work	day.			
Eye protection	: Wear the fol Safety glass		protective equipment:				
Skin and body protection	: Skin should	be washed after	contact.				
 Skin and body protection Skin should be washed after contact. Hygiene measures If exposure to chemical is likely during to flushing systems and safety showers cloplace. When using do not eat, drink or smoke. Wash contaminated clothing before re-u 							

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: Grease



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	Colour		:	black	
	Odour		:	odourless	
	Odour ⁻	Threshold	:	No data available	
	рН		:	7	
	Melting	point/freezing point	:	320 °C	
	Initial b range	oiling point and boiling	:	No data available	
	Flash p	oint	:	Method: Pensky-l Not applicable	Martens closed cup
	Evapor	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	
	Vapour	pressure	:	Not applicable	
	Relative	e vapour density	:	Not applicable	
	Relative	e density	:	1.89 - 1.93 (24 °C	3)
	Solubili Wat	ty(ies) er solubility	:	No data available	
	Partitio octanol	n coefficient: n- /water	:	Not applicable	
	Auto-ig	nition temperature	:	No data available	
	Decom	position temperature	:	300 °C	
	Viscosi Visc	ty :osity, kinematic	:	Not applicable	
	Explosi	ve properties	:	Not explosive	
	Oxidizir	ng properties	:	The substance or	mixture is not classified as oxidizing.
	Particle	e size	:	No data available	



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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	:	Hydrofluoric acid
-		Carbonyl difluoride
		Carbon dioxide
		Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Information on likely routes of	:	Skin contact
exposure		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 sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

SAFETY DATA SHEET



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	Γ - repeated exposur		
Not c	lassified based on ava	ailable information.	
-	ration toxicity		
Not c	lassified based on ava	ailable information.	
12. ECOL	OGICAL INFORMAT	ION	
Ecot	oxicity		
No da	ata available		
Persi	istence and degrada	bility	
No da	ata available		
Bioa	ccumulative potentia	al	
No da	ata available		
Mobi	lity in soil		
No da	ata available		
Othe	r adverse effects		
No d	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 han- dling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

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 IMO instruments

Not applicable for product as supplied.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture



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Othe	er information	:	Krytox [™] and any associated logos are trademarks or copy- rights of The Chemours Company FC, LLC. 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.				
Furt	her information						
com	Sources of key data used to compile the Safety Data Sheet		Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/				
Full text of other abbreviations							
ACO	GIH	:	USA. ACGIH Thre	eshold Limit Values (TLV)			
ACC	GIH / TWA GIH / STEL GIH / C	::	8-hour, time-weig Short-term expose Ceiling limit				

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System



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