

**Krytox™ GPL 246**

Version 3.0

Revision Date 12/09/2015

Ref. 130000031516

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Krytox™ GPL 246
Product Grade/Type	:	GPL 246
Product Use	:	Lubricant, For professional users only.
Restrictions on use	:	Do not use product for anything outside of the above specified uses
Manufacturer/Supplier	:	The Chemours Company FC, LLC 1007 Market Street Wilmington, DE 19899 United States of America
Product Information	:	1-844-773-CHEM (outside the U.S. 1-302-773-1000)
Medical Emergency	:	1-866-595-1473 (outside the U.S. 1-302-773-2000)
Transport Emergency	:	CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION**Product hazard category**

Acute toxicity (Inhalation)	Category 4
Specific target organ toxicity - single exposure	Category 2



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Label content

Pictogram

:



Signal word

: Warning

Hazardous warnings

: Harmful if inhaled.
May cause damage to organs. (Respiratory system, Central nervous system)

Hazardous prevention measures

: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
Call a POISON CENTER or doctor/ physician if you feel unwell.
Store locked up.
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

The product as such is not hazardous., The thermal decomposition vapours of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco., Repeated episodes of polymer fume fever may result in persistent lung effects.

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 75 %



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Copper	7440-50-8	15 %

SECTION 4. FIRST AID MEASURES

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Oxygen or artificial respiration if needed.
- Skin contact : Wash with water and soap as a precaution.
- Eye contact : Rinse with plenty of water. If eye irritation persists, consult a specialist.
- Ingestion : Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- Most important symptoms/effects, acute and delayed : No applicable data available.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.



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SECTION 5. FIREFIGHTING MEASURES

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|---|--|
| Suitable extinguishing media | : The product itself does not burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : No applicable data available. |
| Specific hazards | : In fire conditions, toxic decomposition products may be formed. (see also section 10) |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment. |
| Further information | : Standard procedure for chemical fires. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

- | | |
|-----------------------------|--|
| Safeguards (Personnel) | : Avoid contact with the skin and the eyes. Refer to protective measures listed in sections 7 and 8. |
| Environmental precautions | : Prevent material from entering sewers, waterways, or low areas. |
| Spill Cleanup | : Shovel into suitable container for disposal. |
| Accidental Release Measures | : No applicable data available. |

SECTION 7. HANDLING AND STORAGE



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Handling (Personnel)	: Avoid breathing vapors from overheated material. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material. General industrial hygiene practice. Keep away from food and drink. Keep away from tobacco products. Wash hands and face before breaks and immediately after handling the product.
Handling (Physical Aspects)	: No applicable data available.
Dust explosion class	: No applicable data available.
Storage	: No special storage conditions required. Keep container closed to prevent contamination. No decomposition if stored and applied as directed.
Storage period	: No applicable data available.
Storage temperature	: No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	: In the event that the polymer is heated above 300°C (572 F) local ventilation should be used to avoid exposure to fumes.
Personal protective equipment	
Respiratory protection	: No personal respiratory protective equipment normally required. In the case of hazardous fumes caused by overheating, wear self-contained breathing apparatus.
Hand protection	: Additional protection: No particular glove type is recommended, but nitrile may be used.
Eye protection	: Safety glasses
Skin and body protection	: No PPE is specified however, avoid contact with skin, eyes, and clothing. Preventive skin protection
Exposure Guidelines	
Exposure Limit Values	

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Copper (flakes)			
Permissible exposure limit:	(OSHA)	1 mg/m3	8 hr. TWA Dust and mist. as Cu
Permissible exposure limit:	(OSHA)	0.1 mg/m3	8 hr. TWA Fume. as Cu
TLV	(ACGIH)	0.2 mg/m3	TWA Fume. as Cu
TLV	(ACGIH)	1 mg/m3	TWA Dust and mist. as Cu

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	: solid
Form	: waxy, grease
Color	: copper

Odor : none

Odor threshold : No applicable data available.

pH : No applicable data available.

Melting point/freezing point : Melting point/range
320 °C (608 °F)Boiling point/boiling range : Boiling point/boiling range
no data availableFlash point : closed cup
does not flash

Evaporation rate : No applicable data available.

Flammability (solid, gas) : No applicable data available.

Upper explosion limit : No applicable data available.



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Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapour density	: No applicable data available.
Specific gravity (Relative density)	: 3
Water solubility	: insoluble
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: 300 °C
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: No applicable data available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No applicable data available.
Conditions to avoid	: Decomposition temperature 320 °C (608 °F)
Incompatible materials	: No applicable data available.
Hazardous decomposition products	: Hazardous thermal decomposition products:: Fluorinated compounds



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SECTION 11. TOXICOLOGICAL INFORMATION

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Further information : The product contains no substances classified as hazardous to health in concentrations which should be taken into account.

Copper

Inhalation LC50 : 2.83 mg/l , Rat
Target Organs: Respiratory system, Central nervous system
Respiratory effects
Altered respiratory rate
Breathing difficulties
Laboured breathing
Central nervous system effects
Abnormal posture

Dermal LD50 : > 2,000 mg/kg , Rat

Oral Acute toxicity estimate : 500 mg/kg , Rat
Target Organs: Respiratory system, Central nervous system
Central nervous system effects
Abnormal posture
Lethargy
Respiratory effects
Altered respiratory rate

Skin irritation : No skin irritation, Rabbit

Eye irritation : No eye irritation, Rabbit

Skin sensitization : Did not cause sensitisation on laboratory animals., Guinea pig

Repeated dose toxicity : Oral - feed
multiple species
-
No toxicologically significant effects were found.

Carcinogenicity : Not classifiable as a human carcinogen.

Mutagenicity : Tests on bacterial or mammalian cell cultures did not show mutagenic



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effects.

Animal testing did not show any mutagenic effects.

Reproductive toxicity : No toxicity to reproduction
Animal testing showed no reproductive toxicity.

Teratogenicity : Evidence suggests the substance is not a developmental toxin in animals.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Copper

96 h LC50 : Oncorhynchus mykiss (rainbow trout) 0.0028 mg/l

Additional ecological information : The product contains no substances classified as hazardous to the environment in concentrations which should be taken into account.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product : In accordance with local and national regulations.

Contaminated packaging : Dispose of container properly.
If recycling is not practicable, dispose of in compliance with local regulations.

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SECTION 14. TRANSPORT INFORMATION

IATA_C	UN number	: 3077
	Proper shipping name	: Environmentally hazardous substance, solid, n.o.s. (Copper flake)
IMDG	Class	: 9
	Packing group	: III
	Labelling No.	: 9MI
	UN number	: 3077
	Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper flake)
	Class	: 9
	Packing group	: III
	Labelling No.	: 9
	Marine pollutant	: yes (Copper flake)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA	: On the inventory, or in compliance with the inventory
SARA 313 Regulated Chemical(s)	: Copper (flakes)
PA Right to Know Regulated Chemical(s)	: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Copper (flakes), Polytetrafluoroethylene
NJ Right to Know Regulated Chemical(s)	: Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as



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carcinogens, mutagens or teratogens): Copper (flakes)

CERCLA Reportable Quantity : 33670 lbs
Based on the percentage composition of this chemical in the product.:
Copper (flakes)

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use or resell Chemours™ materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information, please contact your Chemours representative.

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