

Version 0.0

Revision Date 04/03/2015

Ref. 15000001171

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 Product Grade/Type	<ul> <li>DuPont<sup>™</sup> Krytox<sup>®</sup> Sodium Nitrite Inhibited PFPE/PTFE Greases (GPL 22(X) Series)</li> <li>GPL: 220, 221, 222, 223, 224, 225, 226, 227, 227-500 XHT - AC, ACX, NDR 1466 FG 34 Corrugator: 226 FG, 227 FG Hi Temp T8-26, T8-27 HTC: 26, 27 AUT 2245 Krytox SLB 266 Krytox MF440</li> </ul>
Product Use	: Lubricant, For industrial use only.
Restrictions on use Manufacturer/Supplier	<ul> <li>Do not use product for anything outside of the above specified uses</li> <li>Ratermann Manufacturing, Inc.</li> <li>601 Pinnacle Place</li> <li>Livermore, CA 94550</li> <li>United States of America</li> </ul>
Product Information Medical Emergency Transport Emergency	<ul> <li>1-800-264-7793</li> <li>1-800-441-3637 (outside the U.S. 1-302-774-1139)</li> <li>CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)</li> </ul>
Other information	: professional use

#### SECTION 2. HAZARDS IDENTIFICATION

Not classified as a hazardous substance or mixture according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

#### Other hazards



Version 0.0

Revision Date 04/03/2015

Ref. 15000001171

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.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Sodium nitrite	7632-00-0	2 %

#### **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.



Version 0.0

Ref. 15000001171

#### SECTION 5. FIREFIGHTING MEASURES

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

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.	
		0.40	

3/9



Version 0.0

ision Date 04/03/2015	Ref. 15000001171
	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) Dust explosion class Storage	<ul> <li>No applicable data available.</li> <li>No applicable data available.</li> <li>No special storage conditions required. Keep container closed to prevent contamination.</li> <li>No decomposition if stored and applied as directed.</li> </ul>
Storage period	: No applicable data available.
Storage temperature	: No applicable data available.
TION 8. EXPOSURE CONTRO	DLS/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 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	
This product does n Communication Sta	ot contain any exposure limits that require disclosure according to OSHA Hazard ndard 2012.
TION 9. PHYSICAL AND CHE	MICAL PROPERTIES
Appearance Physical state	: solid
	4/9



Version 0.0

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Revision Date 04/03/2015

Ref. 15000001171

Form Color	: grease : white
Odor	: none
Odor threshold	: No applicable data available.
рН	: neutral
Melting point/freezing point	: Melting point/range 320 °C (608 °F)
Boiling point/boiling range	: No applicable data available.
Flash 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.
Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapour density	: No applicable data available.
Specific gravity (Relative density)	: 1.89 - 1.93 at 24 °C (75 °F)
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.
Ignition temperature	: no data available
Decomposition temperature	: 320 °C
	5/0

5/9



Version 0.0

Revision Date 04/03/2015	Ref. 15000001171
Viscosity, kinematic	: No applicable data available.
Viscosity	: No applicable data available.
SECTION 10. STABILITY AND RE	EACTIVITY
Reactivity	: Stable under recommended storage conditions.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous	: No applicable data available.
reactions Conditions to avoid	: Decomposition temperature 320 °C (608 °F)
Incompatible materials	: No applicable data available.
Hazardous decomposition products	: Hazardous thermal decomposition products:: Fluorinated compounds
SECTION 11. TOXICOLOGICAL I	NFORMATION
DuPont <sup>™</sup> Krytox <sup>®</sup> Sodium Nitrite Ir Oral ALD - Approxima	hibited PFPE/PTFE Greases (GPL 22(X) Series) te : > 11,000 mg/kg , Rat
Lethal Dose Oral LD50	: > 5,000 mg/kg , Rat
Skin irritation	: slight irritation, Rabbit
Eye irritation	: slight irritation, Rabbit
Sensitisation	: Animal test did not cause sensitization by skin contact., Guinea pig
Carcinogenicity	: Animal testing did not show any carcinogenic effects.
Mutagenicity	: In vitro skin absorption study (OECD 428) - Total amount of absorbable sodium nitrite through human skin: 0.026%
Reproductive toxicity	: No toxicity to reproduction
Teratogenicity	: No toxicity to reproduction
Further information	: The product contains no substances classified as hazardous to health

6/9



Version 0.0				
Revision Date 04/03/2015	Ref. 15000001171			
Sodium nitrite Inhalation 4 h LC50	in concentrations which should be taken into account. : 1.45 mg/l , Rat Dust			
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).				
by IARC, NTP, or OSHA, as a	ent in this material at concentrations equal to or greater than 0.1% are listed carcinogen.			
SECTION 12. ECOLOGICAL INFORMA	TION			
Aquatic Toxicity Sodium nitrite				
96 h LC50	: Oncorhynchus mykiss (rainbow trout) 0.54 mg/l			
72 h ErC50	: Desmodesmus subspicatus (green algae) > 100 mg/l			
72 h NOEC	: Desmodesmus subspicatus (green algae) 100 mg/l			
48 h EC50	: Daphnia magna (Water flea) 15.4 mg/l			
29 d	: NOEC Cyprinus carpio (Carp) 21 mg/l			
Environmental Fate DuPont <sup>™</sup> Krytox <sup>®</sup> Sodium Nitrite Inhibited PFPE/PTFE Greases (GPL 22(X) Series) Biodegradability : Not readily biodegradable.				
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 - : In accordance with local and national regulations. Product				
	7/9			



Version 0.0	
Revision Date 04/03/2015	Ref. 15000001171
Contaminated packaging	: Dispose of container properly. If recycling is not practicable, dispose of in compliance with local regulations.
SECTION 14. TRANSPORT INFO	RMATION
Not classified as dangerous in	the meaning of transport regulations.
SECTION 15. REGULATORY INF	ORMATION
TSCA SARA 313 Regulated Chemical(s)	<ul><li>On the inventory, or in compliance with the inventory</li><li>Sodium nitrite</li></ul>
CERCLA Reportable Quantity	: 2000 lbs Based on the percentage composition of this chemical in the product.: Sodium nitrite
SECTION 16. OTHER INFORMAT	ION
Restrictions for use	: Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications and DuPont CAUTION Regarding Medical Applications.
DuPont <sup>™</sup> and Krytox <sup>®</sup> are trad	emarks of E. I. du Pont de Nemours and Company
Revision Date	: 04/03/2015
	8/9



Version 0.0

Revision Date 04/03/2015

Ref. 150000001171

Contact:

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