Version 2.0

Revision Date 04/14/2015

Ref. 15000002268

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	:	DuPont [™] Krytox [®] GPL 29(X) Series GPL: 294, 295, 296, 297 XHT- EP: 298, 299
Product Use	:	Lubricant, For industrial use only.
Restrictions on use Manufacturer/Supplier	:	Do not use product for anything outside of the above specified uses DuPont 1007 Market Street Wilmington, DE 19898 United States of America
Product Information Medical Emergency Transport Emergency	:	1-800-441-7515 (outside the U.S. 1-302-774-1000) 1-800-441-3637 (outside the U.S. 1-302-774-1139) CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)
Other information	:	professional use

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category Germ cell mutagenicity

:

Category 2

Label content

Pictogram





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Signal word	: Warning
Hazardous warnings	: Suspected of causing genetic defects.
Hazardous prevention measures	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. IF exposed or concerned: Get medical advice/ attention. Store locked up. Dispose of contents/ container to an approved waste disposal plant.

Other hazards

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: 76 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

		CAS-No.	Concentration
Sodium nitrite		7632-00-0	1 - 5 %
TION 4. FIRST AID MEA	ASURES		
General advice	: When symptoms persist c	or in all cases of doubt seek	medical advice.
Inhalation	: Move to fresh air in case of combustion. Oxygen or ar	of accidental inhalation of fu tificial respiration if needed.	



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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.

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.



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Safeguards (Personnel)	: Avoid contact with skin and eyes. Wear suitable protective equipment. 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. 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	 No applicable data available. No applicable data available. 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 $300^{\circ}C$ (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
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Skin and body protection	: No PPE is specified however, avoid contact with skin, eyes, and clothing. Preventive skin protection
Exposure Guidelines Exposure Limit Values	
Sodium nitrite AEL *	(DUPONT) 2 mg/m3 8 & 12 hr. TWA Respirable dust.
	ble Exposure Limit. Where governmentally imposed occupational exposure limits which are effect, such limits shall take precedence.
lower than the AEL are in a ECTION 9. PHYSICAL AND C Appearance Physical state	effect, such limits shall take precedence. HEMICAL PROPERTIES : solid
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Vapour Pressure :	No applicable data available.
Vapour density :	No applicable data available.
Specific gravity (Relative : density)	1.9
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 :	320 °C
Viscosity, kinematic :	No applicable data available.
Viscosity :	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

SECTION 11. TOXICOLOGICAL INFORMATION

DuPont[™] Krytox[®] GPL 29(X) Series Oral ALD - Approximate : > 11,000 mg/kg , Rat Lethal Dose



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	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
Codium nitr	Further information	:	Information given is based on data on the components and the toxicology of similar products.
Sodium nitr	Carcinogenicity	:	Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.
	Mutagenicity	:	In vitro tests showed mutagenic effects Experiments showed mutagenic effects in cultured bacterial cells. Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others. Genetic damage in animals was observed in some laboratory tests but not in others.
	Reproductive toxicity	:	No toxicity to reproduction Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
	Teratogenicity	:	Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

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 Sodium nitrite

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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 [™] Krytox [®] GPL 29(X) Biodegradability Additional ecological information	: Not readily biodegradable.
SECTION 13. DISPOSAL CONSIDE	RATIONS
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.
SECTION 14. TRANSPORT INFORM	ΙΑΤΙΟΝ
Not classified as dangerous in th	e meaning of transport regulations.
SECTION 15. REGULATORY INFOR	RMATION
TSCA : SARA 313 Regulated : Chemical(s)	 On the inventory, or in compliance with the inventory Sodium nitrite
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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): Sodium nitrite, 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 carcinogens, mutagens or teratogens): Sodium nitrite
CERCLA Reportable Quantity	: 5000 lbs Based on the percentage composition of this chemical in the product.: Sodium nitrite
California Prop. 65	: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known
SECTION 16. OTHER INFORMATION	
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,

of the DuPont POLICY Regarding Medical Applications and DuPont CAUTION Regarding Medical Applications

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Contact person : MSDS Coordinator, DuPont Chemicals and Fluoroproducts, Wilmington, DE 19898, (800) 441-7515

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



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Significant change from previous version is denoted with a double bar.