Material Safety Data Sheet

DuPont Performance Elastomers

Viton® fluoroelastomer

Version 2.0

Revision Date 08/27/2008 Ref. 150000002358

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	:	Viton® fluoroelastomer
Product Grade/Type	:	A Barium-free, A-35 Barium free, A-100VS, VTR-9236, VTR-5883, VTR-7168, VTX-9239, VTX-9248, VTX-7570, VTX-7571
MSDS Number	:	150000002358
Product Use	:	Rubber products
Manufacturer	:	DuPont Performance Elastomers L.L.C Bellevue Park Corporate Center, 300 Bellevue Parkway Wilmington, Delaware 19809
Product Information	:	1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency	:	1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency	:	CHEMTREC: 1-800-424-9300 (outside the U.S. 703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation

Polyvinylidenefluoride/hexafluoropropene : Inhalation of decomposition products from overheating may cause lung irritation or shortness of breath. Fluid in the lungs (pulmonary oedema) with cough, wheezing, abnormal lung sounds, possibly progressing to severe shortness of breath and bluish discoloration of the skin (symptoms might be delayed)

Carcinogenicity

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 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Polyvinylidenefluoride/hexafluoropropene	9011-17-0	>99%

SECTION 4. FIRST AID MEASURES

Skin contact	:	Wash off with soap and water. Cool skin rapidly with cold water after contact with hot polymer. Do not peel polymer from the skin. Consult a physician if necessary.
Eye contact	:	Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.

Inhalation	:	Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Consult a physician.
Ingestion	:	If victim is conscious: Drink water as a precaution. Consult a physician.
General advice	:	If symptoms persist, call a physician.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable Properties Flash point	:	> 204 ℃ (> 399 ℉) open cup
Fire and Explosion Hazard	:	Burning produces obnoxious and toxic fumes.
Extinguishing Media	:	Carbon dioxide (CO2), Foam, Water, Dry chemical
Firefighting Instructions	:	Wear self-contained breathing apparatus and protective suit. Wear neoprene gloves during cleaning up work after a VITON® fire. Evacuate personnel to safe areas. Do not allow run-off from fire fighting to enter drains or water courses. The solid polymer can only be burned with difficulty.

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)	:	Ventilate the area. Refer to protective measures listed in sections 7 and 8.
Spill Cleanup	:	Shovel into suitable container for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.
Accidental Release Measures	:	Try to prevent the material from entering drains or water courses.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel)	:	Protect from contamination. Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe dust. Do not breathe fumes evolved from hot polymer. General precaution for all plastics and elastomers: Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing. When using do not eat, drink or smoke.

Handling (Physical Aspects)	:	General precaution for all plastics and elastomers: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Avoid dust formation.
Storage	:	Keep in a dry, cool and well-ventilated place. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	:	Use only in area provided with appropriate exhaust ventilation.
Personal protective equipment		
Eye protection	:	Safety glasses with side-shields
Skin protection	:	If there is a potential for contact with hot/molten material wear heat resistant clothing and footwear. If VITON® is used above 315℃ the surface may contain hydrogen fluoride condensate which may cause severe burns. In this case wear neoprene gloves. Skin should be washed after contact.
Respiratory protection	:	Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Exposure Guidelines

Exposure Limit Values

Hydrogen fluoride, anhydrous

PEL	(OSHA)	6 ppm	STEL as F
PEL	(OSHA)	3 ppm	TWA
		Skin designation applies.	
TLV	(ACGIH)	2 ppm	Ceiling as F
TLV	(ACGIH)	0.5 ppm	TWA as F

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	sheets, pellets
Color	:	white, off-white
Odor	:	none
Density	:	1.75 - 1.90 g/cm3
Water solubility	:	insoluble

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Processing temperature > 200 ℃ (> 392 ℉) Avoid heating for prolonged periods above the recommended upper processing limit.
Incompatibility	:	Powdered metals Finely divided aluminium Alkali metals Alkaline earth metals

Decomposition	:	Hazardous decomposition products Hydrogen fluoride, Carbonyl fluoride, Fluorinated hydrocarbons, Fluorinated olefins.
Polymerization	:	Polymerization will not occur. During drying, cleaning and moulding, small amounts of hazardous gases and/or particulate matter may be released. These may irritate eyes, nose and throat.

SECTION 11. TOXICOLOGICAL INFORMATION

Polyvinylidenefluoride/hexafluoropropene

Dermal	:	No adverse effects expected.
Oral ALD	:	> 5,000 mg/kg, rat
Skin irritation	:	non-irritant
Repeated dose toxicity	:	Inhalation No adverse effects expected. Oral Liver enlargement
Carcinogenicity	:	No adverse effects expected.
Mutagenicity	:	No adverse effects expected.
Toxicity to reproduction	:	No adverse effects expected.
Teratogenicity	:	No adverse effects expected.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Polyvinylidenefluoride/hexafluoropropene

: This product has no known eco-toxicological effects.

Additional ecological information	:	We have no quantitative data concerning the ecological effects of this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal	:	If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations. Incinerate only in incinerators capable of scrubbing out acidic combustion

products.

Environmental Hazards : Offer rinsed packaging material to local recycling facilities.
If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA Status : In compliance with TSCA Inventory requirements for commercial purposes.

SARA 313 Regulated Chemical(s) : 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.

California Prop. 65 : Chemicals known to State of California to cause cancer, birth defects or any other harm: none known

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): No components present on the PA state hazardous substance lists.

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): No components present on the NJ state hazardous substance lists.

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use in medical applications involving permanent implantation in the human body. For other medical applications see DuPont Performance Elastomer's caution bulletin No. H-69237.

Before use read DuPont Performance Elastomer's safety information.® Registered trademark of DuPont Performance Elastomers

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