

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont Performance Elastomers L.L.C. Page 1
Material Safety Data Sheet

"VITON" FLUOROELASTOMER ALL IN SYNONYM LIST VIT132
VIT132 Revised 18-AUG-2006

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

"VITON" is a registered trademark of DuPont Performance Elastomers L.L.C..

"EXTREME" is a trademark of DuPont Performance Elastomers L.L.C..

Tradenames and Synonyms

"VITON" "EXTREME" ETP600S
"VITON" VTR9270 #

Company Identification

MANUFACTURER/DISTRIBUTOR
DuPont Performance Elastomers L.L.C.
Bellevue Park Corporate Center
300 Bellevue Parkway
Wilmington, Delaware 19809

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.
302-774-1000)
Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.
703-527-3887)
Medical Emergency : 1-800-441-3637 (outside the U.S.
302-774-1139)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
TETRAFLUOROETHYLENE-PERFLUORO(METHYLVINYLEETHER)- ETHYLENE-BROMOTETRAFLUOROBUTENE POLYMER	105656-63-1	>98
BARIUM SULFATE	7727-43-7	<1

Components (Remarks)

Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

HAZARDS IDENTIFICATION

Potential Health Effects

ADDITIONAL HEALTH EFFECTS

Before using, read Bulletin H-71129, "Handling Precautions for "VITON" and Related Chemicals."

ACUTE OR IMMEDIATE EFFECTS - ROUTES OF EXPOSURE AND SYMPTOMS

INGESTION Not a probable route of exposure. Low toxicity.

SKIN Prolonged contact may produce skin irritation. Avoid skin contact.

EYE Mechanical irritation.

INHALATION Toxic and corrosive hydrogen fluoride may be liberated during processing above 200 C (392 F), or from smoking tobacco or cigarettes contaminated with resin dust. These vapors can irritate the eyes, nose, throat and lungs. Lung effects may be delayed for several hours.

CHRONIC EFFECTS None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None known.

BARIUM SULFATE

HEALTH HAZARD INFORMATION:

In acute toxicity testing in animals, this compound was of very low toxicity by ingestion.

May cause eye irritation.

Prolonged excessive inhalation exposure to the dust may cause the formation of harmless nodular granules in the lung.

HUMAN HEALTH EFFECTS OF OVEREXPOSURE BY:

Eye contact may initially include mechanical eye irritation with discomfort, tearing, or blurring of vision.

Prolonged inhalation exposure to the dust may cause formation of harmless nodule granules in the lung, an affliction called "baritosis", which has no effect on lung function, and disappears if exposure is discontinued.

(HAZARDS IDENTIFICATION - Continued)

Carcinogenicity Information

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

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.

SKIN CONTACT

Flush skin with water after contact. Wash contaminated clothing before reuse.
If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

EYE CONTACT

Flush eyes with plenty of water. Consult a physician if symptoms persist.

INGESTION

Not a probable route. However, in case of accidental ingestion, call a physician.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : >204 C (>399 F)
Method : Open cup

Fire and Explosion Hazards:

Hazardous gases/vapors produced in fire are hydrogen fluoride (HF), carbon monoxide, carbonyl fluoride, and, low molecular weight fluorocarbons.

(FIRE FIGHTING MEASURES - Continued)

Extinguishing Media

Water, Foam, Dry Chemical, CO2.

Fire Fighting Instructions

Wear self-contained breathing apparatus. Wear full protective equipment.

Does not burn without an external flame. Protect from hydrogen fluoride fumes which react with water to form hydrofluoric acid. Wear Neoprene gloves when handling refuse from a fire.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

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

Spill Clean Up

Sweep up to avoid slipping hazard.

HANDLING AND STORAGE

Handling (Personnel)

See FIRST AID and PERSONAL PROTECTIVE EQUIPMENT SECTIONS.

Storage

Store in a cool, dry place. Keep containers tightly closed to prevent moisture absorption and contamination.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

VENTILATION Vapors and fumes liberated during hot processing should be exhausted from work areas to maintain hydrogen fluoride and methyl bromide concentrations below the PEL. Avoid contamination of cigarettes or tobacco with polymer.

Personal Protective Equipment

EYE/FACE PROTECTION

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying of molten material.

RESPIRATORS

When temperatures exceed 200 degrees C and ventilation is inadequate to maintain concentrations below exposure limits, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING

If there is potential contact with hot/molten material, wear heat resistant clothing and footwear. Do not touch decomposed parts even when cool. Neoprene gloves recommended.

Exposure Guidelines

Exposure Limits

"VITON" FLUROELASTOMER ALL IN SYNONYM LIST VIT132

PEL (OSHA) : Particulates (Not Otherwise Regulated)
15 mg/m³, 8 Hr. TWA, total dust
5 mg/m³, 8 Hr. TWA, respirable dust

Other Applicable Exposure Limits

BARIUM SULFATE

PEL (OSHA) : 15 mg/m³, total dust, 8 Hr. TWA
5 mg/m³, respirable dust, 8 Hr. TWA

TLV (ACGIH) : 10 mg/m³, total dust, 8 Hr. TWA

AEL * (DuPont) : 10 mg/m³, 8 & 12 Hr. TWA, total dust
5 mg/m³, 8 & 12 Hr. TWA, respirable dust

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Solubility in Water : Insoluble
Odor : None
Form : Sheet
Specific Gravity : 1.77-1.86

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Conditions to Avoid

Temperatures above 200 C (392 F) without adequate ventilation when compounding ingredients are present.

Incompatibility with Other Materials

Incompatible with finely divided metals such as aluminum.
Compounding with metal powders presents an explosion hazard.

Decomposition

HAZARDOUS DECOMPOSITION PRODUCTS Hydrogen fluoride (HF) and perfluoroolefins.

If "VITON" is used or tested at temperatures above >316 degrees C, the surface of the parts may contain HF or HF condensate, which may cause severe burns, sometimes with symptoms delayed for several hours. Wear neoprene or PVC (if temperature is below melting point of PVC) gloves when handling parts or equipment after exposure to such high temperatures. If condensate is expected, wash equipment and parts well with limewater (calcium hydroxide solution). Discard gloves after handling degraded "VITON" parts. Small amounts of methyl bromide are formed during vulcanization. The OSHA permissible exposure limits are 3 ppm for HF and 5 ppm-skin for methyl bromide. The "skin" notation serves as a reminder that exposure can result through skin absorption as well as through inhalation, and that appropriate precautions should be taken to prevent both types of exposure. Since methyl bromide is a gas formed during vulcanization, exposure to skin is unlikely to occur.

TOXICOLOGICAL INFORMATION

Animal Data

BARIUM SULFATE

Inhalation LC50: no information found
Skin absorption LD50: no information found
Oral LD50: > 5000 mg/kg in rats (Very low toxicity by ingestion)

The compound is untested for skin or eye irritancy, and is untested for animal sensitization.

Toxic effects in animals occurring from repeated inhalation exposures are lung changes.

(TOXICOLOGICAL INFORMATION - Continued)

No animal test reports are available to define carcinogenic, mutagenic, developmental, or reproductive hazards.

ECOLOGICAL INFORMATION

Ecotoxicological Information

AQUATIC TOXICITY:

No information is available. Toxicity is expected to be low based on insolubility in water.

DISPOSAL CONSIDERATIONS

Waste Disposal

Preferred options for disposal are (1) recycling and (2) landfill. Incinerate only if incinerator is capable of scrubbing out hydrogen fluoride and other acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/ provincial, and local regulations.

TRANSPORTATION INFORMATION

Shipping Information

DOT
Hazard Class : Not regulated

REGULATORY INFORMATION

U.S. Federal Regulations

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

State Regulations (U.S.)

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet.

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES): None known.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

(REGULATORY INFORMATION - Continued)

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): None known.

OTHER INFORMATION

Additional Information

MEDICAL USE: CAUTION: Do not use in medical applications
involving permanent implantation in the human body. For other
medical applications see DuPont Performance Elastomers Medical
Application Policy (H-69237).

The data in this Material Safety Data Sheet relates only to the
specific material designated herein and does not relate to use in
combination with any other material or in any process.

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Indicates updated section.

This information is based upon technical information believed to be
reliable. It is subject to revision as additional knowledge and
experience is gained.

End of MSDS