

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

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

Page 1

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"VITON" CURATIVE ALL IN SYNONYM LIST VIT003  
VIT003 Revised 21-SEP-2006  
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CHEMICAL PRODUCT/COMPANY IDENTIFICATION  
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Material Identification

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

Tradenames and Synonyms

"VITON" CURATIVE NO. 30, VC-30,  
"VITON" RCR-6321, RCX-6320,

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)

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COMPOSITION/INFORMATION ON INGREDIENTS  
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Components

Material	CAS Number	%
VINYLLIDENE FLUORIDE-HEXAFLUOROPROPENE POLYMER	9011-17-0	0-50
VINYLLIDENE FLUORIDE-HEXAFLUOROPROPENE-TETRAFLUOROETHENE POLYMER	25190-89-0	0-50
BISPHENOL AF	1478-61-1	0-50
4/4'DICHLORODIPHENYL SULFONE	80-07-9	0-1

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.

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HAZARDS IDENTIFICATION  
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## Potential Health Effects

## ADDITIONAL HEALTH EFFECTS

Before using, read Safety Bulletin, "Handling Precautions for "VITON" and Related Chemicals".

HUMAN HEALTH EFFECTS OF OVEREXPOSURE TO VINYLIDENE  
FLUORIDE-HEXAFLUOROPROPENE POLYMER

Skin contact with uncured polymer may cause skin irritation with discomfort or rash. Significant skin permeation and systemic toxicity after contact appears unlikely. There are no reports of human sensitization.

Eye contact with uncured polymer may cause irritation with discomfort, tearing, or blurring of vision.

Inhalation of fumes from burning polymer may cause temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath. Higher exposures to fumes from burning material may cause pulmonary edema (body fluid in the lungs) with cough, wheezing, abnormal lung sounds possibly progressing to severe shortness of breath and bluish discoloration of the skin. Symptoms may be delayed. Prompt medical attention is required.

Smokers should avoid contamination of tobacco products with polymer and should wash their hands before smoking.

Human health effects of overexposure by inhalation, ingestion, or skin or eye contact may include; skin irritation with discomfort or rash; eye irritation with discomfort, tearing, or blurring of vision; otherwise no acceptable information is available to confidently predict the effects of excessive human exposure to this compound.

## BISPHENOL AF

Human health effects of overexposure by inhalation, ingestion, or skin or eye contact may include; skin irritation with discomfort or rash; eye irritation with discomfort, tearing, or blurring of vision; otherwise no acceptable information is available to confidently predict the effects of excessive human exposure to this compound.

## 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.

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FIRST AID MEASURES  
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## First Aid

## INHALATION

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation.

However, if exposed to fumes from overheating or combustion, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

## 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

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

## INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

## Notes to Physicians

Activated charcoal mixture may be beneficial. Suspend 50 g activated charcoal in 400 mL water and mix well. Administer 5 mL/kg, or 350 mL for an average adult.

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FIRE FIGHTING MEASURES  
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## Flammable Properties

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

## Fire and Explosion Hazards:

Pellet may accumulate static charge when poured from one container to another.

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

## (FIRE FIGHTING MEASURES - Continued)

Will not burn without external flame.

## Extinguishing Media

Water, Foam, Dry Chemical, CO2.

## Fire Fighting Instructions

Wear self-contained breathing apparatus and clothing to protect from hydrogen fluoride fumes, which react with water to form hydrofluoric acid. Wear NEOPRENE gloves when handling refuse from a fire involving "VITON".

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ACCIDENTAL RELEASE MEASURES  
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## 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.

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HANDLING AND STORAGE  
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## 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.

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EXPOSURE CONTROLS/PERSONAL PROTECTION  
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## Engineering Controls

VENTILATION Vapors and fumes liberated during hot processing should be exhausted from work areas to maintain hydrogen fluoride concentrations below the PEL.

Provide grounding of equipment when handling pellets to prevent static build-up. 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" CURATIVE ALL IN SYNONYM LIST VIT003  
PEL (OSHA) : None Established  
TLV (ACGIH) : None Established

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PHYSICAL AND CHEMICAL PROPERTIES  
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## Physical Data

Melting Point : NA  
% Volatiles : NA  
Solubility in Water : Insoluble  
Odor : Slight  
Form : Pellets, chips or sheets  
Color : Silver gray to amber  
Specific Gravity : 1.64 (VC-30)

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STABILITY AND REACTIVITY  
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## Chemical Stability

Stable at normal temperatures and storage conditions.

## Conditions to Avoid

Temperatures above 200 C (392 F) without adequate ventilation.

## Incompatibility with Other Materials

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

## (STABILITY AND REACTIVITY - Continued)

## 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.

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TOXICOLOGICAL INFORMATION  
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## Animal Data

## VINYLIDENE FLUORIDE-HEXAFLUOROPROPENE POLYMER

Oral ALD : >5000 mg/kg In rats

Uncured polymer produced mild irritation on rabbit skin, but did not cause skin sensitization. Classified as "non-irritant" when tested by OECD protocol on rabbits. Aqueous latex dispersions of polymer caused slight eye irritation.

Repeated oral doses of this polymer caused enlargement and fatty degeneration of the liver. These liver effects diminished after a 14 day recovery period. No other clinical or pathological effects were found.

Single inhalation exposure to thermal decomposition products of this polymer include respiratory irritation and pulmonary edema. Repeated exposure to sub-lethal levels of the thermal decomposition products caused labored breathing and emphysema.

## BISPHENOL AF

Oral ALD : 3400 mg/kg In rats

The compound is a skin irritant and an eye irritant, but is not a skin sensitizer in animals. Toxic effects described in animals from short exposures by inhalation, ingestion, or skin contact include nonspecific effects such as weight loss and irritation. Tests in bacterial or mammalian cell cultures demonstrate no mutagenic activity.

## (TOXICOLOGICAL INFORMATION - Continued)

Slightly toxic by ingestion (oral LD50 500 - 5,000 mg/kg). The compound is a skin irritant and an eye irritant, but is not a skin sensitizer in animals. Toxic effects described in animals from short exposures by inhalation, ingestion, or skin contact include nonspecific effects such as weight loss and irritation. Tests in bacterial or mammalian cell cultures demonstrate no mutagenic activity.

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ECOLOGICAL INFORMATION  
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## Ecotoxicological Information

## AQUATIC TOXICITY:

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

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DISPOSAL CONSIDERATIONS  
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## 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.

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TRANSPORTATION INFORMATION  
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## # Shipping Information

DOT  
Hazard Class : Not regulated

## Shipping Information -- Canada

This material is Not Regulated.

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REGULATORY INFORMATION  
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## 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

## (REGULATORY INFORMATION - Continued)

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.

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.

## Canadian Regulations

## WHMIS Classification:

CLASS D Division 2 Subdivision B - Toxic Material. Skin or Eye Irritant.

CEPA Status : DSL: REPORTED/INCLUDED.

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OTHER INFORMATION  
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## 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).

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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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CHESTNUT RUN PLAZA 713  
WILMINGTON, DE 19880-0713  
Telephone : 302-999-2319

# 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