



MATERIAL SAFETY DATA SHEET

MSDS# 2750

SECTION 1

QUADRANT EPP
2120 FAIRMONT AVENUE
P.O. BOX 14235
READING, PA. 19612-4235

TELEPHONE NUMBERS:
PRODUCT INFORMATION(Quadrant EPP) -
610-320-6600
TRANSPORTATION EMERGENCY (CHEMTREC) -
800-424-9300

MATERIAL IDENTIFICATION

PRODUCT NAME: **SYMALIT[®]-PVDF**

CHEMICAL NAME: **VINYLLIDINE FLUORIDE POLYMER**

CAS NO.: **24937-79-9**

PRODUCT USE: **ENGINEERING THERMOPLASTIC STOCK SHAPE FOR
SUBSEQUENT FABRICATION.**

TSCA INVENTORY STATUS: **ALL REPORTABLE INGREDIENTS ARE LISTED
IN THE TSCA CHEMICAL SUBSTANCE INVENTORY.**

SECTION 2

COMPOSITION/INFORMATION ON INGREDIENTS:

IDENTITY	CAS#	CONCENTRATION	OSHA PEL
ETHENE,1,1-DIFLUORO-, HOMOPLOYMER	24937-79-9	100%	NOT LISTED

SECTION 3

HEALTH HAZARD DATA

ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYSTEMS.

INGESTION: **NOT A PROBABLE ROUTE OF EXPOSURE.**

SKIN: **MOLTEN POLYMER CAUSES THERMAL BURNS.**

EYE: **MECHANICAL IRRITATION ONLY.**

INHALATION: **SHAPES NOT RESPIRABLE BUT MACHINING MAY GENERATE A
NUISANCE DUST WHICH CAN CAUSE MECHANICAL IRRITATION TO THE
EYES, SKIN, NOSE AND THROAT.**

SECTION 4

FIRST AID MEASURES

IN CASE OF CONTACT, FLUSH THE AREA WITH PLENTY OF WATER. REMOVE MATERIAL FROM CLOTHING. WASH CLOTHING BEFORE REUSE. IF MOLTEN POLYMER GETS ON THE SKIN, COOL RAPIDLY WITH COLD WATER. DO NOT ATTEMPT TO PEEL POLYMER FROM THE SKIN. OBTAIN MEDICAL TREATMENT FOR THERMAL BURNS.

IF SWALLOWED, DO NOT INDUCE VOMITING. GIVE WATER TO DRINK. GET MEDICAL ATTENTION IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, IF DUST OR VAPORS ARE INHALED, REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN AND GET MEDICAL ATTENTION.

GENERIC FIRST AID: FOR HYDROGEN FLUORIDE (HF). IF THERMAL DECOMPOSITION OF THIS PRODUCT OCCURS RELEASING HF, ADDITIONAL FIRST AID MEASURES ARE REQUIRED. HF DECOMPOSITION BY-PRODUCT IS EXTREMELY CORROSIVE AND CAN CAUSE SEVERE BURNS WHICH MAY NOT BE IMMEDIATELY VISIBLE OR PAINFUL. EXPOSURE TO HF MAY BE FATAL IF ABSORBED THROUGH THE SKIN, INHALED OR SWALLOWED. IN ALL CASES OF MAJOR HYDROGEN FLUORIDE EXPOSURE (INCLUDING SKIN BURNS ABOUT THE SIZE OF THE PALM OF THE HAND) HYPOCALCEMIA MAY BE PRESENT. MONITOR CALCIUM LEVELS FREQUENTLY AND EKG FOR SIGNS OF CALCIUM DEPLETION. PATIENTS WITH BURNS OF THE NECK OR FACE, OR WITH SIGNS OF RESPIRATORY IRRITATION, SHOULD BE MONITORED FOR DELAYED PULMONARY EDEMA, AND EDEMA OF THE UPPER AIRWAY WITH RESPIRATORY OBSTRUCTION. RESPIRATORY CARE SHOULD BE CLOSELY SUPERVISED AND MAY INCLUDE FURTHER ADMINISTRATION OF 2.5% CALCIUM GLUCONATE BY NEBULIZATION. DO NOT ADMINISTER LOCAL ANESTHETICS AFTER SKIN CONTACT AS THE LEVEL OF PAIN IS AN INDICATION OF THE EFFECTIVENESS OF THE CALCIUM GLUCONATE TREATMENT. IF PAIN CONTINUES LONGER THAN 30 MINUTES, CONSIDER INJECTING CALCIUM GLUCONATE (5%) INTO THE SKIN AND SUBCUTANEOUS TISSUE BENEATH, AROUND AND WITHIN THE AFFECTED AREA. IF INGESTION OCCURS, DO NOT INDUCE VOMITING. ADMINISTER 4 TO 8 OUNCES OF WATER FOLLOWED BY 2 TO 4 OUNCES OF AN ANTACID CONTAINING CALCIUM OR MAGNESIUM.

FIRST AID SUPPLIES FOR HYDROGEN FLUORIDE:

USE OF THE FOLLOWING MATERIALS HAS BEEN SHOWN TO BE USEFUL FOR HF TREATMENT AS EXPLAINED ABOVE:

2.5% CALCIUM GLUCONATE GEL

1.0% CALCIUM GLUCONATE IN SALINE OCULAR SOLUTION

2.5% CALCIUM GLUCONATE IN SALINE INHALANT

ANTACID CONTAINING CALCIUM OR MAGNESIUM

SECTION 5FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT: **NOT APPLICABLE.**

UNUSUAL FIRE, EXPLOSION HAZARDS: **NONE.**

HAZARDOUS DECOMBUSTION PRODUCTS: **WHEN BURNED, THE FOLLOWING HAZARDOUS PRODUCTS OF COMBUSTION CAN OCCUR: OXIDES OF CARBON AND HYDROGEN FLUORIDE.**

SPECIAL FIRE FIGHTING INSTRUCTIONS: **FIRE FIGHTERS AND OTHERS EXPOSED TO PRODUCTS OF COMBUSTION SHOULD WEAR FULL PROTECTIVE CLOTHING INCLUDING SELF-CONTAINED BREATHING APPARATUS. FIRE FIGHTING EQUIPMENT SHOULD BE THOROUGHLY DECONTAMINATED AFTER USE.**

EXTINGUISHING MEDIA: **USE WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL.**

>= Physical health Hazards:

DUST MAY FORM EXPLOSIVE MIXTURES WITH AIR. AVOID DUST FORMATION AND CONTROL IGNITION SOURCES. ALL PLASTIC DUST PARTICLES SUSPENDED IN AIR ARE COMBUSTIBLE AND MAY BE EXPLOSIVE. KEEP AWAY FROM HEAT, SPARKS, FLAME, AND OTHER IGNITION SOURCES. PREVENT DUST ACCUMULATIONS AND DUST CLOUDS. EMPLOY GROUNDING, VENTING, AND EXPLOSIVE RELIEF PROVISIONS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND NFPA PROVISIONS IN ANY PROCESS CAPABLE OF GENERATING DUST AND/OR STATIC ELECTRICITY. EXPLOSION HAZARDS APPLY ONLY TO DUSTS, NOT GRANULAR FORMS OF THIS PRODUCT. SEE ALSO SPECIAL PRECAUTIONS SECTION BELOW.

SECTION 6ACCIDENTAL RELEASES

SPILL OR RELEASE: **CLEAN UP BY VACUUMING OR SWEEPING TO PREVENT FALLS.**

SECTION 7STORAGE CONDITIONS

STORE IN A COOL, DRY PLACE. THIS MATERIAL IS NOT HAZARDOUS UNDER NORMAL STORAGE CONDITIONS; HOWEVER, MATERIAL SHOULD BE STORED IN CLOSED CONTAINERS, IN A SECURE AREA TO PREVENT CONTAINER DAMAGE AND SUBSEQUENT SPILLAGE.

SECTION 8PROTECTION INFORMATION

EYE: Safety glasses are recommended to prevent particulate matter from entering eyes while grinding or machining.

SKIN: Protective gloves are required when handling hot polymer. Also, long sleeve cotton shirt and long pants if handling molten polymer.

VENTILATION: Local exhaust at processing equipment to keep particulates below 5 mg/m³, the OSHA limit for respirable dusts. Grinding and machining of parts should be reviewed to assure that particulate levels are kept at recommended levels.

RESPIRATOR: If dust is generated and ventilation is inadequate, use NIOSH/MSHA certified respirator which will protect against dust.

SECTION 9PHYSICAL/CHEMICAL DATA

APPEARANCE: CLEAR.

ODOR: ESSENTIALLY ODORLESS.

MELTING POINT: 165 - 172 DEG C.

SOLUBILITY IN WATER: NEGLIGIBLE.

VOLATILE CONTENT %: NONE.

SPECIFIC GRAVITY: 1.76 - 1.80

>= Precautions For Repair & Maintenance Of Contaminated Equipment: Eliminate ignition sources:

TRANSFER FROM STORAGE WITH A MINIMUM AMOUNT OF DUSTING. GROUND ALL TRANSFER, BLENDING, AND DUST COLLECTING EQUIPMENT TO PREVENT STATIC SPARKS IN ACCORDANCE WITH NFPA 70 "NATIONAL ELECTRIC CODE". REVIEW AND COMPLY WITH ALL RELEVANT NFPA PROVISIONS, INCLUDING BUT NOT LIMITED TO NFPA 484 AND NFPA 654 RELATED TO COMBUSTIBLE DUST HAZARDS. REMOVE ALL IGNITION SOURCES FROM MATERIAL HANDLING, TRANSFER, AND PROCESSING AREAS WHERE DUST MAY BE PRESENT. LOCAL EXHAUST VENTILATION SHOULD BE PROVIDED IN WORK AREA.

SECTION 10HAZARDOUS REACTIVITY

STABILITY AT ROOM TEMPERATURE: **STABLE.**

SECTION 11TOXICOLOGICAL INFORMATION

CARCINOGENICITY: **THIS PRODUCT IS NOT LISTED IN NTP, IARC OR OSHA AS A CARCINOGEN.**

SECTION 12ECOLOGICAL INFORMATION

AQUATIC TOXICITY: **Toxicity is expected to be low based on insolubility of polymer in water.**

SECTION 13DISPOSAL

SPILL OR RELEASE: **Clean up by vacuuming or wet sweeping to minimize dust exposure.**

WASTE DISPOSAL: **Recycling is encouraged, Landfill or incineration in compliance with Federal, State, and Local regulations.**

SECTION 14TRANSPORT INFORMATION

DOT HAZARD CLASS: **NA**
SHIPPING NAME: **NA**

**SECTION 15A
REGULATORY INFORMATION**

SECTION 313 SUPPLIER NOTIFICATION:
(SARA TITLE III-TOXIC CHEMICALS LIST)

This product contains the hazardous chemicals mentioned in SECTION 2 of this MSDS for routine annual "TOXIC CHEMICAL RELEASE REPORTING" of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372.

STATE RIGHT TO KNOW LAWS

No substances on the state hazardous list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

PENNSYLVANIA:

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE: **NONE KNOWN.**

SUBSTANCES ON THE PENNSYLVANIA SPECIAL HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 0.01% OR MORE: **NONE KNOWN.**

CALIFORNIA PROPOSITION 65:

SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: **NONE KNOWN.**

SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: **NONE KNOWN.**

**SECTION 15B
LABELING INFORMATION**

Health	0
Flammability	1
Reactivity	0
PPE	A
#Acute *Chronic	

SECTION 16MISCELLANEOUS INFORMATION

Issued by: Richard Frey, SHE Manager, NA

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Supersedes: January 8, 2009

The information set forth herein has been gathered from standard reference materials and/or supplier test data and is, to the best knowledge and belief of Quadrant EPP, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones which exist. Quadrant EPP makes no warranties, expressed or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility therefor.

NA = Not applicable

NE = Not established.

> = New or revised information in this section when " > " appears in the left margin.

END OF MSDS