

#### MATERIAL SAFETY DATA SHEET

#### MSDS# 1401

#### 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) -

ACGIH TVL

800-424-9300

#### MATERIAL IDENTIFICATION

PRODUCT NAME: FLUOROSINT 500 (FFM-500), FLUOROSINT 590 (FFM-

590) and FLUOROSINT 620 (FF-620) and MT-01

CHEMICAL NAME: POLYTETRAFLUOROETHYLENE (PTFE) PLUS

FLUOROPHLOGOPITE (SYNTHETIC MICA)

CAS NO.: 9002-84-0 (PTFE)

12001-26-2 (MICA-GROUP MINERALS)

PRODUCT USE: MOLDED AND FABRICATED PARTS.

TSCA INVENTORY STATUS: ALL REPORTABLE INGREDIENTS ARE LISTED

IN THE TSCA CHEMICAL SUBSTANCE INVENTORY.

## **SECTION 2**

HAZARDOUS INGREDIENTS (ADDITIVES NOT HAZARDOUS BY 29 CFR 1910.1200)

IDENTITY CAS#

POLYTETRAFLUOROETHYLENE 9002-84-0 NO EXPOSURE LIMIT ESTABLISHED

\*Carbon Fiber 7440-44-0 2 MG/M<sup>3</sup>

#### **SECTION 3**

#### HEALTH HAZARD DATA

ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYSTEMS.

INGESTION: NOT A PROBABLE ROUTE OF EXPOSURE FOR SHAPES. POWDER

MAY BE HARMFUL IF SWALLOWED, MATERIAL DOES NOT DISSOLVE.

SKIN: POWDER MAY CAUSE SKIN IRRITATION.

EYE: MECHANICAL IRRITATION ONLY.

INHALATION: SHAPES NOT RESPIRABLE.

## EMERGENCY FIRST AID

If exposed to fumes from overheating, move to fresh air.

Consult a physician if symptoms persist.

- Wash skin with soap and plenty of water.
- Flush eyes with water. Consult a physician if symptoms persist.

CHRONIC EFFECTS: NONE KNOWN.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY THIS MATERIAL: NONE KNOWN.

#### **SECTION 5**

## FIRE AND EXPLOSION HAZARD DATA

FLASH IGNITION TEMPERATURE: WILL NOT FLASH.

UNUSUAL FIRE, EXPLOSION HAZARDS: NONE KNOWN.

HAZARDOUS DECOMBUSTION PRODUCTS: HEATING ABOVE THE MELTING POINT, OR PROLONGED HEATING ABOVE 260 C./500 F., MAY CAUSE THERMAL DEGREDATION OF POLYTETRAFLUORETHYLENE WHICH LEADS TO THE FORMATION OF OXIDIZED PRODUCTS CONTAINING CARBON, FLUORINE AND OXYGEN.

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: WATER SPRAY OR ANY CLASS A EXTINGUISHING AGENT.

## >= 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.

#### ACCIDENTAL RELEASES

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

#### **SECTION 7**

## STORAGE CONDITIONS

Dry storage. Keep containers closed to prevent contamination.

#### SECTION 8

## PROTECTION INFORMATION

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

SKIN: This product is not likely to be hazardous by skin contact, but cleansing the skin after use is advisable.

 $\begin{tabular}{ll} VENTILATION: Local exhaust at processing equipment to keep particulates below 15 mg/m3, the OSHA limit for nuisance dusts. Grinding and machining of parts should be reviewed to assure that particulate levels are kept at recommended levels. \\ \end{tabular}$ 

OTHER: Avoid contamination of cigarettes or tobacco with Fluorosint dust.

RESPIRATOR: None under normal processing, if ventilation is adequate.

## PHYSICAL/CHEMICAL DATA

ODOR: ESSENTIALLY ODORLESS.

MELTING POINT: 342 C./ 648 F.

SOLUBILITY IN WATER: INSOLUBLE.

VOLATILE CONTENT %: <1%

SPECIFIC GRAVITY: 2.25-2.35

# >= 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 10

## HAZARDOUS REACTIVITY

STABILITY AT ROOM TEMPERATURE: STABLE.

MATERIALS TO AVOID: NONE KNOWN.

CONDITIONS TO AVOID: HEATING ABOVE 400 C./750 F.

#### TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY: SPECIFIC TOXICITY TESTS HAVE NOT BEEN CONDUCTED ON THIS PRODUCT. THE HAZARD EVALUATION IS BASED ON INFORMATION FROM SIMILAR PRODUCTS, THE INGREDIENTS, TECHNICAL LITERATURE, AND/OR PROFESSIONAL EXPERIENCE FROM THE RESIN MANUFACTURER.

THIS PRODUCT CONTAINS POLYTETRAFLUOROETHYLENE (PTFE). VAPORS WHICH CAN CAUSE FLU-LIKE SYMPTOMS ARE LIBERATED FROM PTFE AT TEMPERATURES ABOVE 250 C./480 F. OR IF CIGARETTES OR OTHER SMOKING MATERIALS ARE CONTAMINATED WITH FLUOROSINT DUST OR MACHINE WASTE.

CARCINOGENICITY: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN 0.1% IS IDENTIFIED AS A CARCINOGEN BY NTP, IARC OR OSHA.

#### **SECTION 12**

### ECOLOGICAL INFORMATION

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

#### **SECTION 13**

#### DISPOSAL

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 14**

## TRANSPORT 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 no known toxic chemicals subject to the reporting requirements 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	А
#Acute *Chronic	

## MISCELLANEOUS INFORMATION

Issued by: Richard Frey, SHE Manager, NA

Issued: January 8, 2009

Supersedes: October 29, 2008

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.

\* = Ingredient for MT-01 material

NA = Not applicable NE = Not established.

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

END OF MSDS