DUPONT

MATERIAL SAFETY DATA SHEET

E. I. DU PONT DE NEMOURS & CO.
POLYMER PRODUCTS DEPARTMENT
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WILMINGTON, DE 19898

TELEPHONE NUMBERS
MEDICAL EMERGENCY 800-441-3637
PRODUCT INFORMATION 800-441-7515
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MATERIAL IDENTIFICATION

PRODUCT NAME	Teflon® FEP Film Types A, C, C20, L, PC, PC-WT All gauges and types.
CHEMICAL NAME	Fluorinated Ethylene Propylene Copolymer
CAS REGISTRY NUMBER	25067-11-2
DOT HAZARD CLASS	Not regulated
SHIPPING NAME	NA
PREPARER	W. H. Martin DATE April 14, 1989

HAZARDOUS COMPONENTS

MATERIAL	None
CAS NO.	NA
CONCENTRATION %	NA
OSHA PEL	NA
ACGIH TLV	NA
ACGIH STEL	NA
DUPONT AEL	NA

SUBSTANCES PRESENT AT A CONCENTRATION OF 0.1% OR MORE CLASSIFIED AS A CARCINOGEN BY IARC, NTP OR OSHA: None.

PHYSICAL/CHEMICAL DATA

APPEARANCE	Film
ODOR	None
MELTING POINT	275°C
SOLUBILITY IN WATER	Insoluble
VOLATILE CONTENT %	NA
SPECIFIC GRAVITY	2.1 - 2.2

FIRE AND EXPLOSION HAZARD DATA

FLASH IGNITION TEMPERATURE Does not flash. **METHOD** Open cup

UNUSUAL FIRE, EXPLOSION HAZARDS Toxic fluorine compounds evolved in fire.

HAZARDOUS COMBUSTION PRODUCTS Hydrogen fluoride (HF), carbonyl fluoride, carbon monoxide and low molecular weight fluorocarbons.

SPECIAL FIRE FIGHTING INSTRUCTIONS Does not burn without an external flame. 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 Teflon®.

EXTINGUISHING MEDIA Water, carbon dioxide, foam, dry chemical.

HAZARDOUS REACTIVITY

MATERIALS TO AVOID Molten alkali metals, interhalogen compounds.

CONDITIONS TO AVOID Teflon® will burn in a atmosphere of 95% oxygen when an ignition source is present.

HAZARDOUS DECOMPOSITION PRODUCTS Above 260°C Teflon® FEP can evolve toxic gaseous materials such as hydrogen fluoride and perfluoroolefins. The OSHA permissible exposure limit for HF is 3 ppm. Particulate matter evolved from overheating may cause polymer fume fever (see INHALATION below).

HEALTH HAZARD DATA

Before using read Teflon® "Safety in Handling and Use", Bulletin E-35824-1.

ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYMPTOMS

INGESTION Not toxic.

SKIN Not toxic.

EYE Mechanical irritation.

INHALATION When thermally decomposed by heating above 260°C, or by smoking tobacco or cigarettes contaminated with polymer dust, may cause polymer fume fever. Symptoms are flu-like, with chills and fever, which may not occur until several hours after exposure and pass off within 36 - 48 hours, even in absence of treatment.

Du Pont recommends treating polymer dust as a nuisance particulate, and has established an AEL of 10 mg/m^3 total dust, the same as the TLV for other nuisance particulates.

EMERGENCY FIRST AID

- If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.
- Flush eyes with plenty of water. Consult a physician if symptoms persist.
- If molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention for thermal burn.

CHRONIC EFFECTS None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None known.

PROTECTION INFORMATION

EYE Safety glasses recommended.

SKIN Gloves and long sleeve shirt are recommended when handling hot polymer.

VENTILATION Use local exhaust to completely remove vapors and fumes liberated during hot processing from the work area.

RESPIRATOR Use respirator when temperature exceeds 260°C if ventilation is inadequate to maintain HF concentration below the permissible exposure limit.

OTHER Avoid contamination of cigarettes or tobacco with polymer dust.

DISPOSAL

SPILL, LEAK OR RELEASE Sweep up to avoid slipping hazard.

WASTE DISPOSAL Landfill or incineration in compliance with federal, state, and local regulations. Incineration requires scrubbing of gaseous products to remove hydrogen fluoride.

AQUATIC TOXICITY Not toxic.

STORAGE CONDITIONS Avoid contamination. Keep containers closed.

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

NA = Not applicable
NE = Not established
AEL = Du Pont Company's Acceptable Exposure Limit
< = New or revised information in this section when "<" is in right margin

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, 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:

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.

NONHAZARDOUS INGREDIENTS PRESENT AT A CONCENTRATION OF 3% OR MORE REQUIRED TO BE LISTED BY PENNSYLVANIA: Since this product contains no hazardous substances as defined by the Pennsylvania R-T-K Regulations, a MSDS is not required by law.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: None known.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE 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.