DU PONT E I DE NEMOURS & CO INC -- KAPTON POLYIMIDE FILM, FLUOROCARBON COATED --5970-01-184-3234 Product ID:KAPTON POLYIMIDE FILM, FLUOROCARBON COATED MSDS Date:02/14/1994 FSC:5970 NIIN:01-184-3234 MSDS Number: CGMJR === Responsible Party === Company Name: DU PONT E I DE NEMOURS & CO INC Address: 1007 MARKET STREET Box:1635 City:WILMINGTON State:DE ZIP:19898 Country:US Info Phone Num:800-441-7515/MSDS 302-992-3511 Emergency Ph one Num:800-441-3637/800-424-9300(CHEMTREC) CAGE:18873 === Contractor Identification === Company Name: E.I. DUPONT DE NEMOURS & CO Address:1007 MARKET STREET Box:City:WILMINGTON State:DE ZIP:19898 Country:US Phone:800-441-7515;800-441-9442 CAGE:18873 ======= Composition/Information on Ingredients ======== Ingred Name: TEFLON FEP PRODUCT CONTAINS INGREDIENT #1 OR #2 OR 68258-85-5 POLYFLUOROCARBON CAS:25067-11-2 Other REC Limits: NONE RECOMMENDED Ingred Name: FLUORINATED ETHYLENE P ERFLUOROALKYL VINYL ETHER COPOLYMER, CAS:26655-00-5 Other REC Limits: NONE RECOMMENDED Ingred Name: DIMETHYL ACETAMIDE CAS:127-19-5 RTECS #:AB7700000 Fraction by Wt: < 1% Other REC Limits: NONE RECOMMENDED OSHA PEL:S, 10 PPM ACGIH TLV:S, 10 PPM; 9596 Ingred Name: POLYIMIDE MFR GIVES CAS NUMBER AS 25038-81-7 Other REC Limits: NONE RECOMMENDED =========== Hazards Identification ==========================

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE Routes of Entry: Inhalation:NO Skin:N

| O Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:INHALATION IS NOT A PROBABLE ROUTE OF EXPOSURE FOR FILM. VAPORS & FUMES FROM HEATING "KAPTON" FLUOROCARBON COATINGS ABOVE 275C OR FROM SMOKING TOBACCO OR CIGARETTES CONTAMINATED WITH FLUOROCARBONS MAY CAUSE POLYMER FUME FEVER. SKIN CONTACT, EYE CONTACT AND INGESTION NOT PROBABLE ROUTES OF EXPOSURE FOR FILM. Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS |
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| AT CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT |
| CARCINOGENS. Effects of Overexposure:POLYMER FUME FEVER: A TEMPORARY, FLU-LIKE |
| ILLNESS OF APPROXIMATELY 24 HOURS DURATION WITH FEVER, CHILLS AND SOMETIMES COUGH. |
| Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER. |
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| First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMO VE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSIST, GET MEDICAL ATTENTION. INH ALATION: IF EXPOSED TO FUMES FROM OVERHEATING OR COMBUSTION, MOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. INGESTION: NOT A PROBABLE ROUTE OF EXPOSURE FOR FILM. |
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| Flash Point:NONFLAMMABLE Lower Limits:NOT GIVEN Upper Limits:NOT GIVEN Extinguishing Media:WATER, FOAM, DRY CHE |

MICAL, CARBON DIOXIDE

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATURS AND CLOTHING TO PROTECT FROM HYDROGEN FLUORIDE WHICH REACTS WITH WATER TO FORM HYDROFLUORIC ACID.

Unusual Fire/Explosion Hazard:WEAR NEOPRENE GLOVES WHEN HANDLING REFUSE FROM A FIRE INVOLVING FLUOROCARBON RESINS.

======== Accidental Release Measures ==========

Spill Release Procedures:PICK UP TO PREVENT SLIPPING HAZARD. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING

| CLEANUP. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER. |
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| =========== Handling and Storage ============= |
| Handling and Storage Precautions:STORE AWAY FROM FLAMMABLE MATERIALS. WASH THOROUGHLY AFTER HANDLING. AVOID CONTAMINATION OF TOBACCO PRODUCTS. |
| Other Precautions:NONE SPECIFIED BY MANUFACTURER. |
| ====== Exposure Controls/Personal Protection ======== |
| Respiratory Protection:NONE REQUIRED UNDER NORMAL CONDITIONS. Ventilation:LOCAL EXHAUST AND MECHAN ICAL (GENERAL) VENTILATION AS REQUIRED TO MAINTAIN EXPOSURE LEVELS. Protective Gloves:RECOMMENDED AS GOOD INDUSTRIAL PRACTICE. Eye Protection:SAFETY GLASSES RECOMMENDED. Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER. Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. Supplemental Safety and Health MEDICAL USE: CAUTION: DO NOT USE IN MEDICAL APPLICATIONS INVOLVING PERMANENT IMPLANTATION IN THE HUMA N BODY. |
| ========= Physical/Chemical Properties ========== |
| HCC:N1 Boiling Pt:B.P. Text:NOT GIVEN Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN Vapor Pres:NOT GIVEN Vapor Density:NOT GIVEN Spec Gravity:> 1.4 Viscosity:NOT GIVEN Evaporation Rate & Deference:NOT GIVEN Solubility in Water:INSOLUBLE Appearance and Odor:LIGHT AMBER TRANSPARENT FILM, NO ODOR Percent Volatiles by Volume:1 % |
| ========= Stability and Reactivity Data ========= |

Stability Indicator/Material

s to Avoid:YES

FINELY DIVIDED METAL POWDERS AND FLUORINE AND RELATED COMPOUNDS (EG CHLORINE TRIFLUORIDE).

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:"KAPTON" FLUROCARBON COATINGS MAY
DEGRADE AT TEMPERATURES >350C PRODUCING HYDROGEN FLUORIDE AND
CARBONYL FLUORIDES.

======= Disposal Considerations ============

Waste Disposal Methods:LANDFILL OR INCINERATE IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATI
ONS. INCINERATOR SHOULD BE
EQUIPPED WITH SCRUBBER TO REMOVE ACIDIC HYDROGEN FLUORIDE FROM OFF-GASES.

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