

E I DUPONT -- DELRIN ACETAL RESIN (500AF NC10)
MATERIAL SAFETY DATA SHEET
NSN: 681000N015219
Manufacturer's CAGE: 18873
Part No. Indicator: A
Part Number/Trade Name: DELRIN ACETAL RESIN (500AF NC10)

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General Information
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Company's Name: E I DUPONT DE NEMOURS & CO
Company's Street: 1007 MARKET STREET
Company's City: WILMINGTON
Company's State: DE
Company's Country: US
Company's Zip Code: 19898
Company's Emerg Ph #: 800-441-3637
Company's Info Ph #: 800-441-7515
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SMJ
Date MSDS Prepared: 21DEC88
Safety Data Review Date: 25MAY95
MSDS Preparer's Name: J B ARMITAGE
Preparer's Company: SAME
MSDS Serial Number: BKNQG
Hazard Characteristic Code: N1

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Ingredients/Identity Information
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Proprietary: NO
Ingredient: POLYOXYMETHYLENE
Ingredient Sequence Number: 01
NIOSH (RTECS) Number: 1004570PO
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: FORMALDEHYDE HOMOPOLYMER
Ingredient Sequence Number: 02
NIOSH (RTECS) Number: 1004571FP
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: POLYTETRAFLUOROETHYLENE
Ingredient Sequence Number: 03
NIOSH (RTECS) Number: 1005984PT
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: STABILIZERS
Ingredient Sequence Number: 04
NIOSH (RTECS) Number: 1000340ST
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ANTIOXIDANTS
Ingredient Sequence Number: 05
NIOSH (RTECS) Number: 1000125AO
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

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Physical/Chemical Characteristics
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Appearance And Odor: GRANULES WITH SLIGHT FORMALDEHYDE ODOR.
Melting Point: 342F,172C
Specific Gravity: 1.54
Solubility In Water: INSOLUBLE

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Fire and Explosion Hazard Data
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Flash Point: 612F,322C
Extinguishing Media: WATER, CO*2, FOAM, DRY CHEMICAL.
Special Fire Fighting Proc: USE NIOSH/MSHA APPROVED SCBA AND FULL
PROTECTIVE EQUIPMENT (FP N) FOR PROTECTION FROM FUMES OF FORMALDEHYDE AND
HYDROGEN FLUORIDE.
Unusual Fire And Expl Hazrds: BURNS WITH A COLORLESS FLAME. DELRIN DUST
CLOUD IGNITION TEMPERATURE 400C.

Reactivity Data

Cond To Avoid (Stability): HEATING ABOVE 230C (FORM FORMALDEHYDE & CAN ALSO EVOLVE HYDROGEN FLUORIDE & TOXIC FLUORINATED HYDROCARBONS).
 Materials To Avoid: STRONG ACIDS & BASES (DECOMPOSES FORMING FORMALDEHYDE) . STRONG OXIDIZING AGENTS. CARE SHOULD BE TAKEN TO (SEE SUPP DATA)
 Hazardous Decomp Products: FORMALDEHYDE IS CLASSIFIED AS AN ANIMAL CARCINOGEN & HAS AN OSHA PERMISSIBLE EXPOSURE LIMIT OF 1 PPM (8-HR (SUPP DATA)
 Conditions To Avoid (Poly): NONE SPECIFIED BY MANUFACTURER.

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
 Route Of Entry - Inhalation: YES
 Route Of Entry - Skin: NO
 Route Of Entry - Ingestion: NO
 Health Haz Acute And Chronic: INGEST: NOT A PROBABLE ROUTE OF EXPOSURE. SKIN: NOT TOXIC. HOT POLYMER WILL CAUSE THERMAL BURNS. EYE: MECHANICAL IRRITATION. INHAL: FORMALDEHYDE IS HIGHLY IRRITATING TO THE EYES AND UPPER RESPIRATORY TRACT. WHEN THE POLYMER IS THERMALLY DECOMPOSED IF MAY CAUSE POLYMER FUME FEVER. CHRONIC: (SEE EFTS OF OVEREXPOS)
 Carcinogenicity - NTP: NO
 Carcinogenicity - IARC: NO
 Carcinogenicity - OSHA: NO
 Explanation Carcinogenicity: NONE.
 Signs/Symptoms Of Overexp: HLTH HAZ: FORMALDEHYDE RELEASED IN SMALL QUANTITY DURING MELT PROCESSING IS CLASSIFIED AS AN ANIMAL CARCINOGEN.
 Med Cond Aggravated By Exp: INDIVIDUALS WITH PREEXISTING DISEASES OF THE LUNGS MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURE TO FORMALDEHYDE.
 Emergency/First Aid Proc: IF EXPOSED TO FUMES FROM OVERHEATING OR COMBUSTION, MOVE TO FRESH AIR. CONSULT MD IF SYMPTOMS PERSIST. FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CONSULT MD IF SYMPTOMS PERSIST. IF MOLTEN POLYMER CONTACTS SKIN, COOL RAPIDLY WITH COLD WATER. DO NOT ATTEMPT TO PEEL POLYMER FROM SKIN. OBTAIN MED ATTN FOR THERMAL BURN.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: SWEEP UP TO PREVENT A SLIPPING HAZARD.
 Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
 Waste Disposal Method: INCINERATION OR LANDFILL IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. ALKALINE SCRUBBING TO REMOVE GASEOUS COMBUSTION PRODUCT REQUIRED FOR INCINERATION.
 Precautions-Handling/Storing: DRY STORAGE. KEEP CONTAINERS CLOSED TO PREVENT CONTAMINATION. OPEN CONTAINERS ONLY IN WELL-VENTILATED AREAS.
 Other Precautions: READ SAFETY PREC TO OBSERVE WHEN HANDLING MOLTEN DELRIN ACETAL RESIN E-49703 AND SAFETY PREC IN MOLDING MANUAL E-09143 BEFORE USING DELRIN. AVOID PROLONGED HEATING ABOVE MELTING POINT (178C).

Control Measures

Respiratory Protection: NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN (FP N) IF LOCAL EXHAUST DOES NOT KEEP FORMALDEHYDE CONCENTRATION BELOW 1 PPM.
 Ventilation: LOCAL EXHAUST AT PROCESSING EQUIPMENT.
 Protective Gloves: PROTECTIVE GLOVES.
 Eye Protection: CHEMICAL WORKERS GOGGLES (FP N).
 Other Protective Equipment: LONG SLEEVE COTTON SHIRT AND LONG PANTS.
 Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
 Suppl. Safety & Health Data: MATL TO AVOID: AVOID CONTAMINATING TOBACCO PRODUCTS. HAZ DECOMP PRODS: TWA), AND A SHORT TERM EXPOSURE LIMIT OF 2 PPM (15-MINUTE). HYDROGEN FLUORIDE HAS A PEL OF 3 PPM (8 HOUR TWA).

Transportation Data

Trans Data Review Date: 91254
 DOT PSN Code: ZZZ
 DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
 IMO PSN Code: ZZZ
 IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
 IATA PSN Code: ZZZ
 IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
 AFI PSN Code: ZZZ
 AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
 Additional Trans Data: NOT REGULATED FOR TRANSPORTATION

Disposal Data

Label Data

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Label Required: YES
Technical Review Date: 13MAY91
Label Date: 13MAY91
Label Status: G
Common Name: DELRIN ACETAL RESIN (500AF NC10)
Signal Word: WARNING!
Acute Health Hazard-Moderate: X
Contact Hazard-Slight: X
Fire Hazard-Slight: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE: HARMFUL IF INHALED.HOT POLYMER WILL
CAUSE THERMAL BURNS. MECHANICAL EYE IRRITATION. AVOID BREATHING DUST. KEEP
CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH EYES,
SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. CHRONIC: HAZARDS NOT
DETERMINED.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: E I DUPONT DE NEMOURS & CO
Label Street: 1007 MARKET STREET
Label City: WILMINGTON
Label State: DE
Label Zip Code: 19898
Label Country: US
Label Emergency Number: 800-441-3637