

The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries. DuPont 1 Page Material Safety Data Sheet "TEDLAR" PVF TRANSPARENT FILMS ALL ON SYNONYM LIST TED014 TED014 Revised 14-MAY-2005 -------\_\_\_\_\_ CHEMICAL PRODUCT/COMPANY IDENTIFICATION \_\_\_\_\_ Material Identification "TEDLAR" is a registered trademark of DuPont. Tradenames and Synonyms "TEDLAR" PVF FILM "TEDLAR" TRANSPARENT FILM "TEDLAR" TTR10AG3, TTR10BG3, TTR10SG3 "TEDLAR" TTR15BG5, TTR15SG5 "TEDLAR" TTR20AG4, TTR20BG4, TTR20SG4 "TEDLAR" TST20BG4, TST20SG4 Company Identification MANUFACTURER/DISTRIBUTOR DuPont Fluoroproducts 1007 Market Street Wilmington, DE 19898 PHONE NUMBERS Product Information : 1-800-441-7515 Transport Emergency : 1-800-424-9300 Medical Emergency : 1-800-441-3637 \_\_\_\_\_ COMPOSITION/INFORMATION ON INGREDIENTS ------\_\_\_\_\_\_ Components % CAS Number Material POLYVINYL FLUORIDE POLYMER 24981-14-4 >98 EPOXY RESIN 25036-25-3 1 DIMETHYLACETAMIDE (DMAC) 127-19-5 <0.5 Heated above 400 deg. F (204 deg. C) can evolve: 7664-39-3 Hydrogen Fluoride as a degradation product <1 Components (Remarks) Material is not known to contain Toxic Chemicals under Section 313

of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

# HAZARDS IDENTIFICATION

Potential Health Effects

#### ADDITIONAL HEALTH EFFECTS

No information found for "Tedlar" film or polyvinyl fluoride polymer. "Tedlar" PVF film is not hazardous as shipped. <1% DMAC may be released when the film is heated to processing temperatures. At temperatures above 400 degrees F (204 degrees C) or on prolonged heating small amounts of hydrogen fluoride will be generated.

HUMAN HEALTH EFFECTS OF OVEREXPOSURE TO HYDROGEN FLUORIDE

Inhalation of low concentrations of HYDROGEN FLUORIDE can initially include symptoms of choking, coughing, and severe eye, nose, and throat irritation. Possibly followed after a symptomless period of 1 to 2 days by fever, chills, difficulty in breathing, cyanosis, and pulmonary edema. Acute or chronic overexposure to HF can injure the liver and kidneys.

Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures from hydrogen fluoride.

#### DIMETHYL ACETAMIDE

Human health effects of overexposure by skin contact may include slight irritation with itching, redness or swelling. There are no reports of human sensititzation. Skin permeation may occur in amounts capable of producing the effects of symstemic toxicity.

Eye contact may cause eye irritation with tearing, pain or blurred vision.

Short-term overexposure by inhalation, ingestion or skin contact may cause non-specific effects such as nausea, headache, dizziness, drowsiness, and weakness. Repeated or excessive over-exposure may cause altered liver function or abdonimal pain, vomiting or jaundice; abnormal kidney function with altered results on blood tests.

Individuals with preexisting diseases of the liver or kidneys may have increased susceptibility to the effects of this material.

#### Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

# FIRST AID MEASURES

First Aid

#### INHALATION

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.

SKIN CONTACT

The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.

#### EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Not a probable route of exposure for "TEDLAR" film.

INGESTION

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

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FIRE FIGHTING MEASURES

Flammable Properties

Hazardous gases/vapors produced in fire are hydrogen fluoride and carbon monoxide.

"Tedlar" does not readily burn or support combustion. "Tedlar" will not contribute significantly to the danger associated with fire in a residential or industrial structure because the volume of carbon monoxide and other gases produced in a fire will present a greater hazard than the volume of carbon monoxide and hydrogen fluoride produced by this film.

Extinguishing Media

Foam, Dry Chemical, CO2, Water.

Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

# \_\_\_\_\_ ACCIDENTAL RELEASE MEASURES Safeguards (Personnel) NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up. Accidental Release Measures Sweep up to avoid slipping hazard. \_\_\_\_\_ HANDLING AND STORAGE Handling (Personnel) See FIRST AID and PROTECTION INFORMATION sections. \_\_\_\_\_ EXPOSURE CONTROLS/PERSONAL PROTECTION \_\_\_\_\_ Engineering Controls VENTILATION Use local exhaust to remove vapors and fumes liberated during hot processing from the work area and maintain concentrations below permissible exposure limits. Personal Protective Equipment EYE/FACE PROTECTION Wear Safety glasses. RESPIRATORS When temperatures exceed 204 degrees C (400 deg F) and ventilation is inadequate to maintain concentrations below exposure limits, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection. During grinding, sanding, or sawing operations use a NIOSH/MSHA approved air purifying respirator with dust/mist cartridge or canister if airborne particulate concentrations are expected to exceed permissible exposure levels.

PROTECTIVE CLOTHING If there is potential contact with hot/molten material, wear heat resistant clothing and footwear.

# Exposure Guidelines

TED014 DuPont Page 5 Material Safety Data Sheet Applicable Exposure Limits DIMETHYLACETAMIDE (DMAC)  $\mathbf{PEL}$ (OSHA) : 10 ppm, 35 mg/m3, 8 Hr. TWA, Skin TLV (ACGIH) : 10 ppm, 36 mg/m3, 8 Hr. TWA, Skin, A4 AEL \* (DuPont) : 10 ppm, 8 & 12 Hr. TWA, Skin Hydrogen Fluoride as a degradation product : 3 ppm, 8 Hr. TWA, as F  $\mathbf{PEL}$ (OSHA) : 0.5 ppm, 8 Hr. TWA, as F Ceiling 2 ppm, as F TLV (ACGIH) AEL \* (DuPont) : 3 ppm, 15 minute TWA \* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence. PHYSICAL AND CHEMICAL PROPERTIES \_\_\_\_\_ Physical Data Solubility in Water : NOT SOLUBLE Odor : Odorless. : Film. Form Density : 1.38 \_\_\_\_\_ STABILITY AND REACTIVITY \_\_\_\_\_ Chemical Stability Stable at normal temperatures and storage conditions. Incompatibility with Other Materials None reasonably foreseeable. Decomposition Decomposes with heat. Decomposition temperature: 204 C (399 F) Hazardous gases/vapors produced are carbon monoxide and hydrogen fluoride Polymerization Polymerization will not occur.

\_\_\_\_\_ ECOLOGICAL INFORMATION Ecotoxicological Information Aquatic Toxicity No data available. Toxicity expected to be low because of negligible solubility in water. \_\_\_\_\_ DISPOSAL CONSIDERATIONS \_\_\_\_\_ Waste Disposal Preferred option for disposal is landfill. Incinerate only if incinerator is capable of scrubbing out hydrogen fluoride and other acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations. \_\_\_\_\_ TRANSPORTATION INFORMATION \_\_\_\_\_ Shipping Information DOT Proper Shipping Name : NA Hazard Class : Not regulated \_\_\_\_\_ REGULATORY INFORMATION U.S. Federal Regulations TSCA Inventory Status : In compliance with TSCA Inventory requirements for commercial purposes. \_\_\_\_\_ OTHER INFORMATION \_\_\_\_\_ Additional Information MEDICAL USE: CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications see DuPont CAUTION Bulletin No. H-50102. 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. SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES): None known.

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## DuPont Material Safety Data Sheet

### (Continued)

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

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

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# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS