



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont  
Material Safety Data Sheet

Page 1

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"ELVANOL" POLYVINYL ALCOHOL ALL IN SYNONYM LIST NOL019  
NOL019 Revised 10-APR-2008  
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CHEMICAL PRODUCT/COMPANY IDENTIFICATION  
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Material Identification

"ELVANOL" is a registered trademark of DuPont.

Tradenames and Synonyms

"ELVANOL" 70-14CB  
"ELVANOL" 71-30CM, 71-30LM  
"ELVANOL" 71-30MS, 71-30S  
"ELVANOL" 71-33  
"ELVANOL" 75-15  
"ELVANOL" 75-15P  
"ELVANOL" 85-82  
"ELVANOL" 85-82CM  
"ELVANOL" 90-50LM  
"ELVANOL" 91-02  
"ELVANOL" 91-03  
"ELVANOL" 91-03D  
"ELVANOL" EPT 93-01, EPT-0217,  
"ELVANOL" T-25  
"ELVANOL" T-25LR, T-25LRJ, T-25P3,  
"ELVANOL" T-66, T-66CB,  
"ELVANOL" T-66LR  
"ELVANOL" T-91  
"ELVANOL" T-99, T-995R

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont Packaging & Industrial Polymers  
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

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COMPOSITION/INFORMATION ON INGREDIENTS  
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Components

Material	CAS Number	%
VINYL ALCOHOL POLYMERS & COPOLYMERS	9002-89-5	0-99
	25213-24-5	0-99
	54626-91-4	0-99
METHANOL	67-56-1	<1
SODIUM ACETATE	127-09-3	<1.85

## (COMPOSITION/INFORMATION ON INGREDIENTS - Continued)

PROCESS AIDS

0-4

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HAZARDS IDENTIFICATION  
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## Potential Health Effects

## ADDITIONAL HEALTH EFFECTS

Before using "ELVANOL" Polyvinyl Alcohol read DuPont Bulletin, "Safe Handling Information".

## ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYMPTOMS

INGESTION Not a probable route of entry. The oral LD-50 of one type of "Elvanol" is greater than 11000 milligrams per kilogram of body weight as determined in rats, which is low toxicity. Other types of "Elvanol" are predicted to have similar LD-50 values.

SKIN One type of "Elvanol" was tested on male guinea pigs. No irritation or sensitization effects were noted. Based on experience with handling these polymers and others which are similar chemically, no unusual dermatitis hazard is expected from routine handling.

EYE Mechanical irritation only.

INHALATION "Elvanol" is supplied as a granular solid. Under certain conditions of use, dust may be formed. Treat this dust as a nuisance dust; use a dust mask if dust exceeds the recommended limits. "Elvanol" is rarely heated above 100 degrees C. If the temperature exceeds 200 degrees C, fumes irritating to the eyes, nose, and throat will be evolved. If exposed to these fumes, the eyes will tear, itch, and turn red. The nose will burn. The throat will burn and coughing may result.

CHRONIC EFFECTS None are known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None are known.

## 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.

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FIRST AID MEASURES  
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## First Aid

## INHALATION

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

## EYE CONTACT

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

## SKIN CONTACT

Wash skin with soap and plenty of water.

If hot polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention for a thermal burn.

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FIRE FIGHTING MEASURES  
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## Flammable Properties

Flash Ignition Temperature: No data

## Fire and Explosion Hazards:

The solid polymer can be combusted only with difficulty. Dust from "ELVANOL" can form an explosive mixture in the air. Information about special precautions needed for bulk handling is available upon request.

HAZARDOUS COMBUSTION PRODUCTS Complete combustion gives carbon dioxide and water. Incomplete combustion gives, in addition, carbon monoxide and hydrocarbon oxidation products including organic acids, aldehydes and alcohols, oxides of sodium.

## Extinguishing Media

Water, CO2, Foam.

## Fire Fighting Instructions

Use self-contained breathing apparatus if exposed to fumes.

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ACCIDENTAL RELEASE MEASURES  
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## Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

## Spill Clean Up

Sweep up to avoid slipping hazard.

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HANDLING AND STORAGE  
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## Handling (Personnel)

See FIRST AID and PERSONAL PROTECTIVE EQUIPMENT SECTIONS.

## Storage

Store in a cool, dry place. Keep container closed to prevent contamination.

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EXPOSURE CONTROLS/PERSONAL PROTECTION  
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## Engineering Controls

In the event the polymer is heated above 200 C (392 F), local ventilation should be used to avoid exposure to fumes. Use ventilation to avoid exposure of personnel to dust.

## Personal Protective Equipment

EYE Eye protection is recommended as good industrial hygiene practice.

SKIN Gloves and a long sleeve shirt are recommended, particularly when hot polymer is being handled.

RESPIRATOR If local ventilation is inadequate, use a respirator for fumes or a dust mask for dust.

## Exposure Guidelines

## Applicable Exposure Limits

## VINYL ALCOHOL POLYMERS &amp; COPOLYMERS

PEL (OSHA) : None Established  
 TLV (ACGIH) : None Established  
 AEL \* (DuPont) : 10 mg/m<sup>3</sup>, 8 & 12 Hr. TWA, total dust  
                   5 mg/m<sup>3</sup>, 8 & 12 Hr. TWA, respirable dust

## METHANOL

PEL (OSHA) : 200 ppm, 260 mg/m<sup>3</sup>, 8 Hr. TWA  
 TLV (ACGIH) : 200 ppm, 8 Hr. TWA, Skin  
                   STEL 250 ppm  
 AEL \* (DuPont) : 200 ppm, 8 & 12 Hr. TWA, Skin

## SODIUM ACETATE

PEL (OSHA) : None Established  
 TLV (ACGIH) : None Established  
 AEL \* (DuPont) : 10 mg/m<sup>3</sup>, 8 & 12 Hr. TWA, total dust  
                   5 mg/m<sup>3</sup>, 8 & 12 Hr. TWA, respirable dust

\* 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.

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PHYSICAL AND CHEMICAL PROPERTIES  
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## Physical Data

Melting Point : Approximately 200 deg. C (392 deg. F)  
 % Volatiles : 5 WT%  
 Solubility in Water : Moderate solubility  
 Odor : Mild  
 Form : Free-flowing granules  
 Color : White  
 Specific Gravity : 1.3

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STABILITY AND REACTIVITY  
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## Chemical Stability

Stability at Room Temperature: Stable

## Conditions to Avoid

Temperatures above 200 C (392 F) .

## Incompatibility with Other Materials

MATERIALS TO AVOID: None are known.

## Decomposition

HAZARDOUS DECOMPOSITION PRODUCTS - carbon monoxide and hydrocarbon oxidation products including organic acids, aldehydes and alcohols, oxides of sodium.

## (STABILITY AND REACTIVITY - Continued)

## Polymerization

Polymerization will not occur.

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ECOLOGICAL INFORMATION  
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## Ecotoxicological Information

## AQUATIC TOXICITY:

Concentrations of "ELVANOL" up to 10,000 milligrams per liter of water showed no mortality or other effect when tested on bluegill sunfish.

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DISPOSAL CONSIDERATIONS  
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## Waste Disposal

Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. The high fuel value of this product makes option 2 very desirable for material that cannot be recycled. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

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TRANSPORTATION INFORMATION  
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## Shipping Information

DOT  
Proper Shipping Name : Not applicable  
Hazard Class : Not regulated

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REGULATORY INFORMATION  
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## U.S. Federal Regulations

TSCA Inventory Status : In compliance with TSCA Inventory requirements for commercial purposes.

## State Regulations (U.S.)

## STATE RIGHT-TO-KNOW

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.

## (REGULATORY INFORMATION - Continued)

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1 % OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES)- Methanol.

WARNING - SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM - Ethylene oxide, acetaldehyde, formaldehyde, hydrazine, and 1,4-dioxane.

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) - Methanol.

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OTHER INFORMATION  
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## NFPA, NPCA-HMIS

NPCA-HMIS Rating  
Health : 1  
Flammability : 1  
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

## Additional Information

MEDICAL USE: CAUTION: Do not use in medical applications involving permanent implantation in the human body. "ELVANOL" is intended for industrial use and is expressly not for use in cosmetic, personal care and pharmaceutical or similar applications. For other medical applications see DuPont CAUTION Bulletin No. H-50102.

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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.

Responsibility for MSDS : T. P. PRICE  
DUPONT PACKAGING & INDUSTRIAL POLYMERS  
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WILMINGTON, DE 19880-0713  
Telephone : 302-999-4664

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