

DuPont Packaging and Industrial Polymers

Patterson Dental Supply Product Code:
902551

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: "Elvax" Resins All In Synonym List VAX012

Manufacturer Name: DuPont Packaging and Industrial Polymers

Address:

1007 Market Street

Wilmington, DE 19898

Business Phone: 1-(800)-441-7515

For information in North America, call: 1-(800)-441-7515

Health Phone: 1-(800)-441-3637

Transportation Phone: 1-(800)-424-9300

Manufacturer MSDS Revision Date: 6-JUN-2003

Trade Names:

"ELVAX" 40L-03, 40L-08, 40W, 40WN, 41W, 46, 46L,

"ELVAX" 140W, 150, 150BP, 150W, 150W-LG, 155W-LG,

"ELVAX" 160W, 170,

"ELVAX" 200W, 205W, 210, 210W, 210WC, 210LW, 220, 220W,

"ELVAX" 240, 240W, 240Z, 250, 250W, 260, 260C, 260CG,

"ELVAX" 260Z, 263, 265, 265BP, 265C, 290, 310, 310W, 350,

"ELVAX" 360, 360C, 360P, 362, 3175, 3175LG,

"ELVAX" 3175LGZ, 3179-2, 3179-3, 3180, 3180Z, 3182, 3182-2,

"ELVAX" 3182Z, 3813,

"ELVAX" 3185, 3185BP, 3185LG, 3188, 3190, 3190LG, 3190LGZ,

"ELVAX" 3200-1, 3200-2, 4031WLG,

"ELVAX" BR3200, BR3800, BR3900, BR4031WLG, BR4600, BR4900,

"ELVAX" CE4035, CE9746, CM574, CM576,

"ELVAX" CM595, CM860, CM3295C, CM3326, CM4987W,

"ELVAX" EP170PS,

"ELVAX" EP340, EP3388, EP3536, EP3538,

"ELVAX" EP3543, EP4056, EP4059, EP4070-N,

"ELVAX" EP4071W, EP4136, EP4147, EP4150, EP4174,

"ELVAX" EP4987-PL, EP4989W, EP4989-2W,

"ELVAX" EP6450,

Synonyms:

"ELVAX" 40L-03, 40L-08, 40W, 40WN, 41W, 46, 46L,

"ELVAX" 140W, 150, 150BP, 150W, 150W-LG, 155W-LG,

"ELVAX" 160W, 170,

"ELVAX" 200W, 205W, 210, 210W, 210WC, 210LW, 220, 220W,

"ELVAX" 240, 240W, 240Z, 250, 250W, 260, 260C, 260CG,

"ELVAX" 260Z, 263, 265, 265BP, 265C, 290, 310, 310W, 350,

"ELVAX" 360, 360C, 360P, 362, 3175, 3175LG,

"ELVAX" 3175LGZ, 3179-2, 3179-3, 3180, 3180Z, 3182, 3182-2,

"ELVAX" 3182Z, 3813,

"ELVAX" 3185, 3185BP, 3185LG, 3188, 3190, 3190LG, 3190LGZ,

"ELVAX" 3200-1, 3200-2, 4031WLG,

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"ELVAX" EP6450,

Distributor Name: DuPont Packaging and Industrial Polymers
Distributor Address:
1007 Market Street
Wilmington, DE 19898
Distributor Telephone: 1-(800)-441-7515
Material Identification:
"ELVAX" is a registered trademark of DuPont.

Product Codes:
VAX012

SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name
ETHYLENE-VINYL ACETATE COPOLYMER Percent
> 98%

Chemical Name
PROCESS AIDS Percent
< 2%

Chemical Name
*VINYL ACETATE CAS#
108-05-4 Percent
< 0.3%

Comments:
* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

SECTION 3 : HAZARDS IDENTIFICATION

Applies to all ingredients:

Route of Exposure:
INGESTION, SKIN, EYE, INHALATION
Potential Health Effects:
Eye Contact:
ACUTE OR IMMEDIATE EFFECTS AND SYMPTOMS:
Mechanical irritation.
Skin Contact:
ACUTE OR IMMEDIATE EFFECTS AND SYMPTOMS:
No data are available. However, based on experience with handling these polymers, no unusual dermatitis hazard is expected from routine handling. Molten polymer contacting the skin will cause thermal burns.
Inhalation:
ACUTE OR IMMEDIATE EFFECTS AND SYMPTOMS:

Polymer is not respirable as marketed. At processing temperatures above 204 deg C, fumes irritating to the eye, nose, and throat may be produced. Exposure may result in redness, tearing, and itching in the eyes together with soreness in the nose and throat with coughing.

Ingestion:

ACUTE OR IMMEDIATE EFFECTS AND SYMPTOMS:

The oral LD-50 in rats using one type of "ELVAX" is in excess of 1000 milligrams per kilogram of body weight. Two week metabolic tests with dogs and rats showed that no significant amount of polymer was retained by the animals. 90-day feeding studies in rats showed that "ELVAX" resins have low toxicity. Slight liver effects were seen in animals fed diets containing 10% "ELVAX"; no effects were seen with diets containing 5% "ELVAX". Overall, no important body systems or organ dysfunction occurred at either dose level.

Other Potential Health Effects:

ADDITIONAL HEALTH EFFECTS: Before using "ELVAX" Resins, read the brochures on the safe handling procedures.

Aggravation of Pre-Existing Conditions:

None known.

*VINYL ACETATE:

Carcinogenicity:

The following components are listed by IARC, NTP, OSHA or ACGIH as carcinogens.

Material: VINYL ACETATE

IARC Designation:

2B

SECTION 4 : FIRST AID MEASURES

Eye Contact:

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

Skin Contact:

The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable. If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

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

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:

260 deg C (500 deg F)

Flash Point Method:

Cleveland open cup

Extinguishing Media:

Water, Foam, Dry Chemical, CO2.

Hazardous Combustion Byproducts:

Complete combustion gives carbon dioxide and water. Incomplete combustion gives, in addition, vinyl acetate, acetic acid, carbon monoxide and hydrocarbon oxidation products including organic acids, aldehydes, acrolein, and alcohols, oxides of nitrogen.

Fire Fighting Instructions:

Wear self-contained breathing apparatus.

Unusual Fire Hazards:

The solid polymer can be combusted only with difficulty. An electrostatic charge can potentially build up when pouring pellets. Grounding of equipment is recommended.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions:

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 Cleanup Measures:

Shovel or sweep up.

SECTION 7 : HANDLING and STORAGE

Handling:

(Personnel): See FIRST AID and PERSONAL PROTECTIVE EQUIPMENT SECTIONS.

Storage:

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

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

Ventilation System:

Local ventilation must be used over processing equipment to maintain vinyl acetate concentrations in air below the PEL.

Use static controls. Static charges can build up and ignite dust or solvent laden atmospheres.

Eye/Face Protection:

Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying of molten material.

Protective Clothing/Body Protection:

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

Respiratory Protection:

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge with a dust/mist filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Exposure Limits:

"ELVAX" RESINS ALL IN SYNONYM LIST VAX012
PEL (OSHA): Particulates (Not Otherwise Regulated)
15 mg/m³, 8 Hr. TWA, total dust
5 mg/m³, 8 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.

Ingredient Guidelines

Ingredient: *VINYL ACETATE

Guideline Type: OSHA PEL-TWA
Guideline Information: None Established
Guideline Type: ACGIH TLV-TWA
Guideline Information: 10 ppm, 35 mg/m³, 8 Hr. TWA, A3
Guideline Type: ACGIH TLV-STEL
Guideline Information: 15 ppm, 53 mg/m³, A3
Guideline Type: Manufacturer Exposure Limit
Guideline Information: AEL * (DuPont): 10 ppm, 8 & 12 Hr. TWA

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance:

Form: Pellets
Color:
Translucent to white
Odor:
Mild ester-like
Melting Point:
Not Applicable
Solubility:
In Water: Negligible
Specific Gravity:
0.93-0.97
Percent Volatile:
Negligible
Flashpoint:
260 deg C (500 deg F)

SECTION 10 : STABILITY AND REACTIVITY

Chemical Stability:

Stable at normal temperatures and storage conditions.
Conditions to Avoid:
Temperatures above 230 deg C for short residence times.
Temperatures above 204 deg C for long residence times.

Incompatibilities with Other Materials:

Incompatible or can react with strong acids, oxidizing agents.

Hazardous Polymerization:

Polymerization will not occur.

Hazardous Decomposition Products:

Vinyl acetate, acetic acid, carbon monoxide, and, hydrocarbon oxidation products including, organic acids, aldehydes, acrolein, and, alcohols, oxides of nitrogen.

SECTION 11 : TOXICOLOGICAL INFORMATION

*VINYL ACETATE:

Acute Health Effects:

Vinyl Acetate is a slight skin and a severe eye irritant, and a weak skin sensitizer in animals. No effects from repeated exposure to Vinyl Acetate by inhalation were observed at 100 ppm in rats. Exposure to higher concentrations of Vinyl Acetate by inhalation caused eye irritation and lacrimation, reduced weight gain, and irritation of the respiratory tract with breathing difficulty. The effects observed in rats and mice exposed by inhalation to 200 and 600 ppm for two years include reduced body weight, and pathological changes in the nose and respiratory tract.

Skin Effects:

Animal Data:

Skin absorption LD50: 2335 mg/kg in rabbits

Ingestion Effects:

Animal Data:

Oral LD50: 2920 mg/kg in rats

Inhalation Effects:

Animal Data:

Inhalation 4 hour LC50: 4000 ppm in rats

Carcinogenicity:

Nasal cavity tumors were observed in rats but not in mice. Research on the mechanism of nasal tumor induction in rats suggests that levels at which humans are likely to be exposed are below the threshold for effects that contribute to tumor formation.

Mutagenicity:

Genetic damage was produced in some types of cell cultures and in animals, but was negative in other studies. No tests for heritable genetic damage were available.

Reproductive Toxicity:

Vinyl Acetate is not a developmental toxin in animals. The effect of Vinyl Acetate on reproduction in animals is not considered significant.

SECTION 12 : ECOLOGICAL INFORMATION

Effect of Material On Aquatic Life:

No information is available. Toxicity is expected to be low based on insolubility in water.

SECTION 13 : DISPOSAL CONSIDERATIONS

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.

SECTION 14 : TRANSPORT INFORMATION

DOT Hazard Class: Not regulated

SECTION 15 : REGULATORY INFORMATION

Applies to All Ingredients:

TSCA 8(b): Inventory Status

In compliance with TSCA Inventory requirements for commercial purposes.

State:

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.

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES) - None known.

WARNING - SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM - None known.

*VINYL ACETATE:

Section 313 Toxic Release Form:

* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

State:

STATE RIGHT-TO-KNOW:

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) - Vinyl Acetate.

SECTION 16 : ADDITIONAL INFORMATION

MSDS Revision Date:

6-JUN-2003

Indicates updated section.

Updated Section:

Section 5: Flammable Properties;

Section 10: Hazardous Decomposition Products

MSDS Author:

Responsibility for MSDS:

T. P. PRICE

DUPONT PACKAGING & INDUSTRIAL POLYMERS

CHESTNUT RUN PLAZA 713

WILMINGTON, DE 19880-0713

Telephone: 302-999-4664

Other Information:

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.

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.