# **CAMPUS®** Datasheet

VESTODUR® X9426 - PBT FR(30) Evonik Industries AG



#### **Product Texts**

#### VESTODUR® X9426 Resin: ISO 7792-PBT, EFHP,A11-007

**VESTODUR®** X9426 is a low viscosity, modified, higher flexible polybuthylene terephthalate resin with a halogen- and phosphorous-free flame retardant.

VESTODUR® X9426 can be used for the injection molding and extrusion process.

Test bars made of this resin are rated V-2 according to UL94 by Underwriters Laboratories Inc.

The used halogen-free flame retardant has a neutral color and does not migrate.

**VESTODUR® X9426** is recommended for special applications, for example, wire insulation and injection molded parts in the electrotechnical industry.

The resin is supplied as cylindrical pellets in polyethylene packaging.

For information about processing of VESTODUR® X9426, please follow the general recommendations in our brochure "VESTODUR® Handling and Processing".

Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	750	MPa	ISO 527-1/-2
Yield stress	30	MPa	ISO 527-1/-2
Yield strain	17	%	ISO 527-1/-2
Nominal strain at break	40	%	ISO 527-1/-2
Charpy impact strength, +23°C	N	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	5	kJ/m²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Temp. of deflection under load, 1.80 MPa	60	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	140	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	130	°C	ISO 306
Burning Behav. at 1.5 mm nom. thickn.	V-2	class	IEC 60695-11-10
Thickness tested (1.5)	1.6	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested (h)	0.8	mm	IEC 60695-11-10
Electrical properties	Value	Unit	Test Standard
Relative permittivity, 100Hz	4.2	-	IEC 60250
Relative permittivity, 1MHz	3.8	-	IEC 60250
Dissipation factor, 100Hz	220	E-4	IEC 60250
Dissipation factor, 1MHz	330	E-4	IEC 60250
Volume resistivity	1E12	Ohm*m	IEC 60093
Other properties	Value	Unit	Test Standard
Density	1310	kg/m³	ISO 1183

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#### Characteristics

#### Processing

Injection Molding, Film Extrusion, Other Extrusion

#### Delivery form

Pellets

# Additives

Release agent, Plasticizer

#### **Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

### Other text information

#### Injection molding

## PREPROCESSING INFORMATION

Maximum Water Content: 0.05 %

When the indicated water content is exceeded, the resin must be dried. The drying time is dependent on the drying temperature. We recommend a drying time of approximately 5 hours at a temperature of 120°C in a fresh air dryer, better yet would be a dry air or vacuum dryer.

#### PROCESSING INFORMATION

Melt Temperature : 240 - 260  $^\circ\text{C}$  Mold Temperature : 60 - 80  $^\circ\text{C}$ 

#### Other extrusion

#### PREPROCESSING INFORMATION

Maximum Water Content: 0.05 % When the indicated water content is exceeded, the resin must be dried. The drying time is dependent on the drying temperature. We recommend a drying time of approximately 5 hours at a temperature of 120°C in a fresh air dryer, better yet would be a dry air or vacuum dryer. **PROCESSING INFORMATION** Melt Temperature : 220 - 260 °C

#### **Chemical Media Resistance**

#### Acids

- 🙂 Acetic Acid (5% by mass) (23°C)
- Citric Acid solution (10% by mass) (23°C)
- Hydrochloric Acid (36% by mass) (23°C)
- Nitric Acid (40% by mass) (23°C)
- Usulfuric Acid (5% by mass) (23°C)

#### Bases

- Sodium Hydroxide solution (35% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

#### Alcohols

- Isopropyl alcohol (23°C)
- 🥶 Methanol (23°C)
- 🙂 Ethanol (23°C)

#### Hydrocarbons

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iso-Octane (23°C)

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Ethers		
$\textcircled{\bullet}$	Diethyl ether (23°C)	
Minera	ll oils	
$\odot$	SAE 10W40 multigrade motor oil (23°C)	
$\odot$	Insulating Oil (23°C)	
Standa	rd Fuels	
$\odot$	Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)	
$\odot$	Diesel fuel (pref. ISO 1817 Liquid F) (23°C)	
Salt so	lutions	
$\odot$	Sodium Chloride solution (10% by mass) (23°C)	
$\odot$	Sodium Hypochlorite solution (10% by mass) (23°C)	
$\odot$	Sodium Carbonate solution (20% by mass) (23°C)	
Other		
$\odot$	Ethyl Acetate (23°C)	
$\odot$	Hydrogen peroxide (23°C)	
$\bigcirc$	Ethylene Glycol (50% by mass) in water (108°C)	
$\odot$	Water (23°C)	
$\bigcirc$	Deionized water (90°C)	
All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification. Should you have any further questions concerning material behavior or properties, please contact us at the following address :		

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