CAMPUS® Datasheet

VESTAMID® EX9350 blk (sw) - (TPA+PA612)-I
Evonik Industries AG

Product Texts

VESTAMID® EX9350 blk

Heat- and weather-resistant, impact-modified polyamide 612 elastomer for extrusion

Resin: ISO 1874-PA612-PPGD,EHL,18-005

VESTAMID® EX9350 is a PA 612 elastomer extrusion compound developed for the manufacturing of tubing systems, e.g. vacuum brake booster lines.

The compound is in particular suitable for applications, that require a continuous high flexibility even if subjected to high temperature load. In contrast to conventionally plasticized materials (plasticizerloss) tubes made from **VESTAMID® EX9350** do not stiffen under elevated temperatures.

The compound is especially suitable for the extrusion of tubing systems that are exposed to increased burst pressures and service temperatures.

Rheological properties	dry / cond	Unit	Test Standard
Molding shrinkage, parallel	**1.1 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.0 / ***	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	**600 / -**	MPa	ISO 527-1/-2
Yield stress	**30 / -**	MPa	ISO 527-1/-2
Yield strain	**35 / -**	%	ISO 527-1/-2
Nominal strain at break	**>50 / -**	%	ISO 527-1/-2
Charpy impact strength, +23°C	**N / -**	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**N / -**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**110[P] / -**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**8 / -**	kJ/m²	ISO 179/1eA

P: Partial Break

Thermal properties	dry / cond	Unit	Test Standard
Melting temperature, 10°C/min	**198 / ***	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	**50 / ***	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**130 / ***	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	**130 / ***	°C	ISO 306

Other properties	dry / cond	Unit	Test Standard
Water absorption	**1.1 / ***	%	Sim. to ISO 62
Humidity absorption	**3.5 / ***	%	Sim. to ISO 62
Density	**1050 / -**	kg/m³	ISO 1183

Characteristics

Processing	Special Characteristics
Profile Extrusion	Light stabilized or stable to light, Heat stabilized or stable to heat

Delivery form	Regional Availability
Pellets	North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Profile extrusion

PREPROCESSING INFORMATION
Maximum Water Content: 0.1 %
When the indicated water content is exceeded, the resin must be dried. The drying time is dependent on the drying temperature. At a drying temperature of 80 °C we recommend, depending on the water content, a drying time of 8 - 16 hours. Fresh air dryers are acceptable, better would be a dry air or vacuum dryer. Please note our product literature, plasticized resins can lose plasticizer during drying.
PROCESSING INFORMATION
Melt Temperature : 210 - 240 °C

Chemical Media Resistance

Acids

- Acetic Acid (5% by mass) (23°C)
- Citric Acid solution (10% by mass) (23°C)

Bases

- Sodium Hydroxide solution (35% by mass) (23°C)
- Sodium Hydroxide solution (1% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

Alcohols

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

Hydrocarbons

- n-Hexane (23°C)
- Toluene (23°C)
- iso-Octane (23°C)

Ketones

- Acetone (23°C)

Ethers

- Diethyl ether (23°C)

Mineral oils

- SAE 10W40 multigrade motor oil (23°C)
- Insulating Oil (23°C)

Standard Fuels

- ISO 1817 Liquid 1 (60°C)
- ISO 1817 Liquid 2 (60°C)
- ISO 1817 Liquid 3 (60°C)
- ISO 1817 Liquid 4 (60°C)

- Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
- Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)
- Diesel fuel (pref. ISO 1817 Liquid F) (23°C)
- Diesel fuel (pref. ISO 1817 Liquid F) (90°C)
- Diesel EN 590 (100°C)

Salt solutions

- Sodium Chloride solution (10% by mass) (23°C)
- Sodium Carbonate solution (20% by mass) (23°C)
- Sodium Carbonate solution (2% by mass) (23°C)
- Zinc Chloride solution (50% by mass) (23°C)

Other

- Ethyl Acetate (23°C)
- Hydrogen peroxide (23°C)
- DOT No. 4 Brake fluid (120°C)
- Water (23°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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Sales range and technical data subject to alteration.