

Product Texts

High viscosity, plasticized, impact modified, heat- and light stabilized polyamide 12 compound

VESTAMID® X7393 is a high viscosity, plasticized, impact modified, heat- and light stabilized polyamide 12 compound for flexible tubing and hoses for the automobile industry according to DIN 73 378 and DIN 74 324, Type PA 12-PHLY.

Parts made of VESTAMID® X7393 are characterized by optimized cold temperature impact resistance for the extrusion of semi-rigid tubing with increased burst pressure resistance as well as exceptional low coefficient of friction and good chemical resistance. Properties of compounds based on Polyamide 12 vary little with changing humidity due to their low moisture absorption.

VESTAMID® X7393 is supplied as pellets, ready for use, in moisture-proof bags.

The use of colorants may affect property values.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30°C.

For information about processing of VESTAMID®, please follow the general commendations about "[Processing of VESTAMID® compounds](#)".

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.VESTAMID.COM

| Processing/Physical Characteristics | dry / cond | Unit | Test Standard |
|--|-------------------|------------------------|----------------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 8.5 / * | cm ³ /10min | ISO 1133 |
| Temperature | 230 / * | °C | - |
| Load | 5 / * | kg | - |
| ^[C] Molding shrinkage, parallel | 0.8 / * | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 1.4 / * | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | dry / cond | Unit | Test Standard |
|--|------------------------|-------------------|----------------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 520 / 470 | MPa | ISO 527 |
| ^[C] Yield stress | 29 / 27 | MPa | ISO 527 |
| ^[C] Yield strain | 28 / 28 | % | ISO 527 |
| ^[C] Nominal strain at break | >50 / >50 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | N / N | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | N / N | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 108 / 130 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 7 / 8 | kJ/m ² | ISO 179/1eA |
| ^[C] Type of failure | C / C | - | - |
| ^[C] Shore D hardness | 67 / * | - | ISO 7619-1 |

[C]: CAMPUS

| Thermal properties | dry / cond | Unit | Test Standard |
|---|-------------------|-------------|----------------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 177 / * | °C | ISO 11357-1/-3 |
| ^[C] Glass transition temperature, 10°C/min | 15 / * | °C | ISO 11357-1/-2 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 45 / * | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 110 / * | °C | ISO 75-1/-2 |
| ^[C] Vicat softening temperature, B | 125 / * | °C | ISO 306 |

[C]: CAMPUS

| Other properties | dry / cond | Unit | Test Standard |
|------------------------------------|------------|-------------------|----------------|
| ^[C] Water absorption | 1.2 / * | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 0.7 / * | % | Sim. to ISO 62 |
| ^[C] Density | 1020 / - | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| ^[C] Injection Molding, melt temperature | 220 | °C | ISO 294 |
| Injection Molding, mold temperature | 60 | °C | ISO 294 |
| Injection Molding, injection velocity | 200 | mm/s | ISO 294 |

[C]: CAMPUS

Characteristics

Processing

Pipe/Tube Extrusion

Delivery form

Pellets, Natural Color

Additives

Plasticizer

Special Characteristics

High impact or impact modified, Light stabilized or stable to light, Heat stabilized or stable to heat

Features

Tribologic Grade

Chemical Resistance

General Chemical Resistance

Applications

Automotive

Regional Availability

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