

## BASF Ultramid® S3K Balance PA 610 (Dry)

Category : Polymer , Thermoplastic , Nylon , Nylon 610

### Material Notes:

Description: BASF supplies polyamide 610 for processing by injection molding under the trade name Ultramid® Balance which is produced by polycondensation of hexamethylene diamine and sebacic acid. This means that more than 60 % of the base polymer for the product family consists of sustainable raw materials. Ultramid® S Balance is highly resistant to fuels, oils and greases, to most solvents, aqueous solutions and alkalis. Its resistance to weakly acid media makes it superior to PA 6 and PA 66. Applications: Overmolding metal and electronic components that come into contact with aggressive media, for example wheel speed sensors Housing and gear components where dimensional stability is a major consideration plug-in connectors, pipes and reservoirs in cooling circuits with high demands on hydrolysis resistance Information provided by BASF

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_BASF-Ultramid-S3K-Balance-PA-610-Dry.php](http://www.lookpolymers.com/polymer_BASF-Ultramid-S3K-Balance-PA-610-Dry.php)

Physical Properties	Metric	English	Comments
Density	1.08 g/cc	0.0390 lb/in <sup>3</sup>	ISO 1183
Water Absorption	3.6 %	3.6 %	ISO 62
Moisture Absorption at Equilibrium	1.4 %	1.4 %	ISO 62
Viscosity Measurement	150	150	[cm <sup>3</sup> /g]; ISO 307
Linear Mold Shrinkage	0.011 - 0.012 cm/cm	0.011 - 0.012 in/in	Test Box 1.5 mm
Linear Mold Shrinkage, Flow	0.016 cm/cm	0.016 in/in	ISO 2577
Linear Mold Shrinkage, Transverse	0.019 cm/cm	0.019 in/in	ISO 2577
Melt Flow	129.6 g/10 min @Load 5.00 kg, Temperature 275 °C	129.6 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	50.0 MPa	7250 psi	ISO 527-1/-2
Elongation at Yield	4.5 %	4.5 %	ISO 527-1/-2
Modulus of Elasticity	2.40 GPa	348 ksi	ISO 527-1/-2
Flexural Strength	85.0 MPa	12300 psi	ISO 178
Flexural Modulus	2.10 GPa	305 ksi	ISO 178
Charpy Impact Unnotched	30.0 J/cm <sup>2</sup> @Temperature -30.0 °C	143 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eU

Mechanical Properties	Metric	English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	ISO 179/1eA
Charpy Impact, Notched	0.300 J/cm <sup>2</sup>	1.43 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	0.500 J/cm <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
Melting Point	220 °C	428 °F	ISO 11357-1/-3

Processing Properties	Metric	English	Comments
Melt Temperature	250 - 270 °C	482 - 518 °F	Injection molding
Mold Temperature	40.0 - 60.0 °C	104 - 140 °F	Injection molding/Extrusion

Descriptive Properties	Value	Comments
Commercial Status	Europe	

## Contact Songhan Plastic Technology Co.,Ltd.

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