

Ultramid® Exp. Deep Gloss D3K
PA*

BASF

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	55 / *	cm³/10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
Molding shrinkage, parallel	1.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.4 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	3150 / 1150	MPa	ISO 527
Yield stress	80 / 44	MPa	ISO 527
Yield strain	3.9 / 21	%	ISO 527
Nominal strain at break	22 / 206	%	ISO 527
Impact Strength (Charpy), +23°C	5 / 20	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	4.6 / -	kJ/m²	ISO 179/1eU
Ball Indentation Hardness	142 / 59	MPa	ISO 2039-1

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	68 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	178 / *	°C	ISO 75-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	8 / *	%	Sim. to ISO 62
Humidity absorption	3 / *	%	Sim. to ISO 62
Density	1180 / -	kg/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	157 / *	cm³/g	ISO 307, 1157, 1628

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	90 - 110	°C	-
Feed temperature	80	°C	-
Zone 1	260	°C	-
Zone 2	270	°C	-
Zone 3	280	°C	-
Nozzle temperature	280	°C	-
Maximum residence time	10	min	-

Characteristics

Processing

Injection Molding

Special Characteristics

UV stabilized

Delivery form

Pellets

Features

High Gloss, Scratch Resistant