SCANAMID 6



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Features Medium flow Fillers Glass fiber

PHYSICAL PROPERTIES Density 1,32 g/cm³ ISO 1183 Viscosity Pas MECHANICAL PROPERTIES Flexural modulus at +23°C 7700 (5000) MPa ISO 178 Maximum flexural strength 220 (130) MPa ISO 527-2 Elongation at break 4 (5) % ISO 527-2 Elongation at yield % ISO 527-2 Ilongation at yield % ISO 527-2 Elongation at yield % ISO 527-2 Ilongation at yield % ISO 527-2 Elongation at yield % ISO 527-2 Ilongation at yield % ISO 527-2 Elongation at yield % ISO 527-2 Ilongation at yield % ISO 527-2 Ilongation at yield * * ISO 527-2 ISO 527-2 ISO 527-2 ISO 527-2 ISO 527-2 ISO 527-2	Feature	Value	Unit	Testmethod
Viscosity Pas MECHANICAL PROPERTIES Flexural modulus at +23°C 7700 (5000) MPa ISO 178 Maximum flexural strength 220 (130) MPa ISO 277-2 Elongation at break 4(5) % ISO 527-2 Elongation at yield % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES *- *- Notched Charpy at +23°C 9 (12) kJ/m² ISO 179 Notched Charpy at +23°C (7) kJ/m² ISO 179 Unnotched Charpy at +23°C (7) kJ/m² ISO 179 Unnotched Charpy at +23°C (7) kJ/m² ISO 179 Unnotched Charpy at +23°C *- kJ/m² ISO 179 Unnotched Charpy at +23°C *- kJ/m² ISO 179 THERMAL PROPERTIES *- *- *- Heat Distortion Temperature *- *- *- HDT 120°C/h at 1820kPa (A) 200 *C<	PHYSICAL PROPERTIES			
MECHANICAL PROPERTIES Flexural modulus at +23°C 7700 (5000) MPa ISO 178 Maximum flexural strength 220 (130) MPa ISO 178 Maximum tensile strength 155 (120) MPa ISO 527-2 Elongation at break 4 (5) % ISO 527-2 Elongation at yield % ISO 527-2 Impact strength * Notched Charpy at +23°C 9 (12) KJ/m² ISO 179 Unnotched Charpy at +23°C '7 KJ/m² ISO 179 Unnotched Charpy at -20°C kJ/m² ISO 179 Unnotched Charpy at -20°C * Heat Distortion Temperature Heat Distortion Temperature HDT 120°C/h at 1820kPa (A) 20 *C	Density	1,32	g/cm³	ISO 1183
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Maximum flexural strength 220 (130) MPa ISO 178 Maximum tensile strength 155 (120) MPa ISO 527-2 Elongation at break 4 (5) % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 9 (12) KJ/m² ISO 179 Notched Charpy at +23°C (7) KJ/m² ISO 179 Unnotched Charpy at -20°C KJ/m² ISO 179 Unnotched Charpy at -20°C KJ/m² ISO 179 THERMAL PROPERTIES Heat Distortion Temperature Heat Distortion Temperature HDT 120°C/h at 1820kPa (A) 200 °C ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C ISO 306 Vicat 50°C/h at 49,05N (B) °C ISO 306 FLAMMABILITY PROPERTIES FLAMMABILI	MECHANICAL PROPERTIES			
Maximum tensile strength 155 (120) MPa ISO 527-2 Elongation at break 4 (5) % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 9 (12) kJ/m² ISO 179 Notched Charpy at -20°C (7) kJ/m² ISO 179 Unnotched Charpy at -20°C Heat Distortion Temperature HDT 120°C/h at 455kPa (B) 200 °C ISO 75/1 Softening temperature	Flexural modulus at +23°C	7700 (5000)	MPa	ISO 178
Elongation at break 4 (5) % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 9 (12) k]/m² ISO 179 Notched Charpy at -20°C (7) k]/m² ISO 179 Unnotched Charpy at -20°C k]/m² ISO 179 Unnotched Charpy at -20°C k]/m² ISO 179 THERMAL PROPERTIES Heat Distortion Temperature HDT 120°C/h at 455kPa (B) 215 °C ISO 75/1 HDT 120°C/h at 1820kPa (A) 200 °C ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C ISO 306 FLAMMABILITY PROPERTIES Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94	Maximum flexural strength	220 (130)	MPa	ISO 178
Elongation at yield % ISO 527-2 IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 9 (12) kJ/m² ISO 179 Notched Charpy at +23°C (7) kJ/m² ISO 179 Unnotched Charpy at +23°C kJ/m² ISO 179 Unnotched Charpy at +20°C HEAT 120°C/h at 458Pa (8) HDT 120°C/h at 455kPa (8) 200 °C ISO 75/I Softening temperature Vicat 50°C/h at 9,81N (A) 200 °C ISO 306 Vicat 50°C/h at 49,05N (B)	Maximum tensile strength	155 (120)	MPa	ISO 527-2
IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 9 (12) kJ/m² ISO 179 Notched Charpy at -20°C (7) kJ/m² ISO 179 Unnotched Charpy at +23°C kJ/m² ISO 179 Unnotched Charpy at -20°C kJ/m² ISO 179 THERMAL PROPERTIES Heat Distortion Temperature HDT 120°C/h at 455kPa (B) 215 °C ISO 75/1 HDT 120°C/h at 1820kPa (A) 200 °C ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C ISO 306 Vicat 50°C/h at 49,05N (B) >200 °C ISO 306 FLAMMABILITY PROPERTIES Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94	Elongation at break	4 (5)	%	ISO 527-2
Impact strength	Elongation at yield		%	ISO 527-2
Notched Charpy at +23°C 9 (12) kJ/m² ISO 179 Notched Charpy at -20°C (7) kJ/m² ISO 179 Unnotched Charpy at +23°C kJ/m² ISO 179 Unnotched Charpy at -20°C kJ/m² ISO 179 THERMAL PROPERTIES Heat Distortion Temperature HDT 120°C/h at 455kPa (B) 215 °C ISO 75/1 HDT 120°C/h at 1820kPa (A) 200 °C ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C ISO 306 Vicat 50°C/h at 49,05N (B) >200 °C ISO 306 FLAMMABILITY PROPERTIES Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94	IMPACT PROPERTIES			
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THERMAL PROPERTIES Heat Distortion Temperature HDT 120°C/h at 455kPa (B) 215 °C ISO 75/1 HDT 120°C/h at 1820kPa (A) 200 °C ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C ISO 306 Vicat 50°C/h at 49,05N (B) >200 °C ISO 306 FLAMMABILITY PROPERTIES Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94	Unnotched Charpy at +23°C		kJ/m²	ISO 179
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Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94	Vicat 50°C/h at 49,05N (B)	>200	°C	ISO 306
GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94	FLAMMABILITY PROPERTIES			
UL94 at 1.6 mm	Flammability			
	GWT at 2 mm	650	°C	IEC 695-2-1
HARDNESS	UL94 at 1.6 mm	НВ		UL94
	HARDNESS			
Hardness Shore D (15 s) Shore D D2240	Hardness Shore D (15 s)		Shore D	D2240
ADDITIONAL INFORMATION	ADDITIONAL INFORMATION			
"^" = additive# 0-9, no effect on material prop	"^" = additive# 0-9, no effect on material prop.			
Filler content 25 ±2% ISO 3451	Filler content	25	±2%	ISO 3451
Mould shrinkage (with flow) 0,3 % ISO 294-4	Mould shrinkage (with flow)	0,3	%	ISO 294-4
Mould shrinkage (across flow) 1,0 % ISO 294-4	Mould shrinkage (across flow)	1,0	%	ISO 294-4

Values within (): 23°C, 50% RH, 24h

Stated values in this datasheet are approximate. The values originate, if nothing else is stated, from standardised test specimens in natural colour. All information, recommendations and advice given by Polykemi AB or any of its subsidiaries and affiliates, written or verbal, are according to Polykemi AB's knowledge to the date of this edition, correct and given in good faith. It is the responsibility of the customer to test and evaluate if the material suits the application and the environment in which it is intended to be used. Polykemi AB, its subsidiaries and affiliates can not be held responsible or liable for any loss incurred through incorrect or faulty use of the products. When producing details in flame retardant material, corrosion protected steel is to recommend for the mould. Polykemi AB takes no responsibility for any printing errors.

Feature	Value	Unit	Testmethod
PROCESS INSTRUCTIONS			
Drying time	2-8	h	
Drying temperature	75	°C	
Maximal moisture content	< 0,1	%	
Melt temperature	250-280	°C	
Mould temperature	70-100	°C	
Peripherical screw speed	250-450	mm/s	
Back pressure	60-100	bar	

Values within (): 23°C, 50% RH, 24h

During production stops, emptying the cylinder is recommended. Leave the screw in its front most position. For polycarbonate it is also recommended to leave the cylinder temperature at 160-180°C and that the heating on the feeding zone is on. When producing details in flame retardant material, corrosion protected steel is to recommend for the mould. For further information, see the material safety datasheet (MSDS).

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