SCANAMID 6



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Features High flow Fillers Glass fiber

Viscosity Pas MECHANICAL PROPERTIES Flexural modulus at +23°C 14000 (9000) MPa ISO 178 Maximum flexural strength 290 (210) MPa ISO 527-2 Elongation at break 210 (150) MPa ISO 527-2 Elongation at yield % ISO 527-2 Ilongate strength % ISO 527-2 IMPACT PROPERTIES * * Impact strength * Notched Charpy at +23°C 13 (16) kJ/m² ISO 179 Notched Charpy at +23°C 12 kJ/m² ISO 179 Unnotched Charpy at +23°C 12 kJ/m² ISO 179 Unnotched Charpy at +23°C 12 kJ/m² ISO 179 Unnotched Charpy at +23°C 12 kJ/m² ISO 179 Heat Distortion Temperature Heat Distortion Temperature HOT 120°C/n at 1820kPa (A) 215 °C ISO	Feature	Value	Unit	Testmethod
Viscosity Pas	PHYSICAL PROPERTIES			
MECHANICAL PROPERTIES Flexural modulus at +23°C 14000 (9000) MPa ISO 178 Maximum flexural strength 290 (210) MPa ISO 178 Maximum tensile strength 210 (150) MPa ISO 527-2 Elongation at break 2 (2,5) % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES *** *** *** Impact strength *** *** Notched Charpy at +23°C 13 (16) kJ/m² ISO 179 Unnotched Charpy at +23°C kJ/m² ISO 179 Unnotched Charpy at +20°C kJ/m² ISO 179 Unnotched Charpy at -20°C	Density	1,56	g/cm³	ISO 1183
Flexural modulus at +23°C	Viscosity		Pas	
Maximum flexural strength 290 (210) MPa ISO 178 Maximum tensile strength 210 (150) MPa ISO 527-2 Elongation at break 2 (2,5) % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 13 (16) kJ/m² ISO 179 Notched Charpy at +23°C 12 kJ/m² ISO 179 Unnotched Charpy at +23°C kJ/m² ISO 179 Unnotched Charpy at -20°C 12 kJ/m² ISO 179 Unnotched Charpy at -20°C HELD SLOPE AND	MECHANICAL PROPERTIES			
Maximum tensile strength 210 (150) MPa ISO 527-2 Elongation at break 2 (2,5) % ISO 527-2 Elongation at yield % ISO 527-2 IMPACT PROPERTIES Impact strength Notched Charpy at +23°C 13 (16) kJ/m² ISO 179 Notched Charpy at +23°C 12 kJ/m² ISO 179 Unnotched Charpy at +23°C kJ/m² ISO 179 Unnotched Charpy at -20°C 6 ISO 179 ISO 179 Weat Date of the	Flexural modulus at +23°C	14000 (9000)	MPa	ISO 178
Elongation at break 2 (2,5) % ISO 527-2 Elongation at yield % ISO 179 Elongation at yield ISO 527-2 Elon	Maximum flexural strength	290 (210)	MPa	ISO 178
Elongation at yield	Maximum tensile strength	210 (150)	MPa	ISO 527-2
IMPACT PROPERTIES Impact strength	Elongation at break	2 (2,5)	%	ISO 527-2
Impact strength Notched Charpy at +23°C 13 (16) kJ/m² 150 179 Notched Charpy at -20°C 12 kJ/m² 150 179 Unnotched Charpy at -20°C kJ/m² 150 179 Unnotched Charpy at -20°C kJ/m² 150 179 THERMAL PROPERTIES Heat Distortion Temperature HDT 120°C/h at 455kPa (B) 215 °C 150 75/1 HDT 120°C/h at 1820kPa (A) 215 °C 150 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C 150 306 Vicat 50°C/h at 49,05N (B) -> °C 150 306 FLAMMABILITY PROPERTIES Flammability - GWT at 2 mm 650 °C 1EC 695-2-1 U194 at 1.6 mm HB U194 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240	Elongation at yield		%	ISO 527-2
Notched Charpy at +23°C 13 (16) kJ/m² ISO 179 Notched Charpy at +23°C 12 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) 215 °C ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) °C ISO 306 Vicat 50°C/h at 9,95N (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 HARDNESS Hardness Shore D (15 s) 81 Shore D D D2240 ADDITIONAL INFORMATION """ = additive# 0-9, no effect on material prop.	IMPACT PROPERTIES			
Notched Charpy at -20°C 12 k]/m² ISO 179 Unnotched Charpy at +23°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) 215 °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 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION """ = additive# 0-9, no effect on material prop.	Impact strength			
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) 215 °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 FIammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION """ = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4 <td>Notched Charpy at +23°C</td> <td>13 (16)</td> <td>kJ/m²</td> <td>ISO 179</td>	Notched Charpy at +23°C	13 (16)	kJ/m²	ISO 179
Unnotched Charpy at -20°C	Notched Charpy at -20°C	12	kJ/m²	ISO 179
### THERMAL PROPERTIES Heat Distortion Temperature Heat Distortion Temperature ### 120°C/h at 455kPa (B) ### 120°C/h at 455kPa (B) ### 120°C/h at 1820kPa (A) ### 215 ### 21	Unnotched Charpy at +23°C		kJ/m²	ISO 179
Heat Distortion Temperature	Unnotched Charpy at -20°C		kJ/m²	ISO 179
HDT 120°C/h at 455kPa (B) HDT 120°C/h at 1820kPa (A) 215 °C ISO 75/1 ISO 75/1 Softening temperature Vicat 50°C/h at 9,81N (A) Vicat 50°C/h at 49,05N (B) FLAMMABILITY PROPERTIES Flammability GWT at 2 mm G50 CD IEC 695-2-1 UL94 at 1.6 mm HB UL94 HARDNESS Hardness Shore D (15 s) ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. "^" = additive# 0-9, no effect on material prop. FIGURE 120 Mould shrinkage (with flow) 215 °C ISO 75/1	THERMAL PROPERTIES			
### HDT 120°C/h at 1820kPa (A) Softening temperature	Heat Distortion Temperature			
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 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	HDT 120°C/h at 455kPa (B)	215	°C	ISO 75/1
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 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	HDT 120°C/h at 1820kPa (A)	215	°C	ISO 75/1
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 UL94 at 1.6 mm HB UL94 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	Softening temperature			
FLAMMABILITY PROPERTIES Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION ** Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	Vicat 50°C/h at 9,81N (A)		°C	ISO 306
Flammability GWT at 2 mm 650 °C IEC 695-2-1 UL94 at 1.6 mm HB UL94 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	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 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	FLAMMABILITY PROPERTIES			
UL94 at 1.6 mm HB UL94 HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	Flammability			
HARDNESS Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	GWT at 2 mm	650	°C	IEC 695-2-1
Hardness Shore D (15 s) 81 Shore D D2240 ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	UL94 at 1.6 mm	НВ		UL94
ADDITIONAL INFORMATION "^" = additive# 0-9, no effect on material prop. Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	HARDNESS			
"^" = additive# 0-9, no effect on material prop Filler content 50 $\pm 2\%$ ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	Hardness Shore D (15 s)	81	Shore D	D2240
Filler content 50 ±2% ISO 3451 Mould shrinkage (with flow) 0,2 % ISO 294-4	ADDITIONAL INFORMATION			
Mould shrinkage (with flow) 0,2 % ISO 294-4	"^" = additive# 0-9, no effect on material prop.			
	Filler content	50	±2%	ISO 3451
Mould shrinkage (across flow) 0,8 % ISO 294-4	Mould shrinkage (with flow)	0,2	%	ISO 294-4
	Mould shrinkage (across flow)	0,8	%	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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