

# SCANAMID 6

B12<sup>^</sup> F20

**Features** Medium flow

**Fillers** Glass fiber

| Feature                                          | Value       | Unit              | Testmethod  |
|--------------------------------------------------|-------------|-------------------|-------------|
| <b>PHYSICAL PROPERTIES</b>                       |             |                   |             |
| Density                                          | 1,27        | g/cm <sup>3</sup> | ISO 1183    |
| Viscosity                                        | --          | Pas               | --          |
| <b>MECHANICAL PROPERTIES</b>                     |             |                   |             |
| Flexural modulus at +23°C                        | 6000 (4200) | MPa               | ISO 178     |
| Maximum flexural strength                        | 200 (110)   | MPa               | ISO 178     |
| Maximum tensile strength                         | 140 (85)    | MPa               | ISO 527-2   |
| Elongation at break                              | 3,5 (6,5)   | %                 | ISO 527-2   |
| Elongation at yield                              | --          | %                 | ISO 527-2   |
| <b>IMPACT PROPERTIES</b>                         |             |                   |             |
| Impact strength                                  | --          | --                | --          |
| Notched Charpy at +23°C                          | 8 (11)      | kJ/m <sup>2</sup> | ISO 179     |
| Notched Charpy at -20°C                          | --          | kJ/m <sup>2</sup> | ISO 179     |
| Unnotched Charpy at +23°C                        | --          | kJ/m <sup>2</sup> | ISO 179     |
| Unnotched Charpy at -20°C                        | --          | kJ/m <sup>2</sup> | ISO 179     |
| <b>THERMAL PROPERTIES</b>                        |             |                   |             |
| 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     |
| <b>FLAMMABILITY PROPERTIES</b>                   |             |                   |             |
| Flammability                                     | --          | --                | --          |
| GWT at 2 mm                                      | 650         | °C                | IEC 695-2-1 |
| UL94 at 1.6 mm                                   | HB          | --                | UL94        |
| <b>HARDNESS</b>                                  |             |                   |             |
| Hardness Shore D (15 s)                          | --          | Shore D           | D2240       |
| <b>ADDITIONAL INFORMATION</b>                    |             |                   |             |
| Filler content                                   | 20          | ±2%               | ISO 3451    |
| Mould shrinkage (with flow)                      | 0,3         | %                 | ISO 294-4   |
| Mould shrinkage (across flow)                    | 0,9         | %                 | ISO 294-4   |
| "^" = additive# 0-9, no effect on material prop. | --          | --                | --          |

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.

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| Feature                     | Value   | Unit | Testmethod |
|-----------------------------|---------|------|------------|
| <b>PROCESS INSTRUCTIONS</b> |         |      |            |
| Drying time                 | 2-8     | h    | --         |
| Drying temperature          | 75      | °C   | --         |
| Maximal moisture content    | < 0,1   | %    | --         |
| Melt temperature            | 250-280 | °C   | --         |
| Mould temperature           | 70-100  | °C   | --         |
| Peripheral 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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