

# SCANAMID 6

## B12^ F30 FR4

**Features** Flame retarded

**Filler** Glass fiber

| Property   | Value   | Unit              | Test method    |
|--|---------|-------------------|----------------|
| <b>PHYSICAL PROPERTIES</b>                       |         |                   |                |
| Density  | 1,57    | g/cm <sup>3</sup> | ISO 1183       |
| Viscosity  | --      | Pas               | --             |
| <b>MECHANICAL PROPERTIES</b>                     |         |                   |                |
| Flexural modulus at +23°C                        | 9000    | MPa               | ISO 178        |
| Maximum flexural strength                        | 220     | MPa               | ISO 178        |
| Maximum tensile strength                         | --      | MPa               | ISO 527-2      |
| Elongation at break                              | --      | %                 | ISO 527-2      |
| Elongation at yield                              | --      | %                 | ISO 527-2      |
| <b>IMPACT PROPERTIES</b>                         |         |                   |                |
| Impact strength                                  | --      | --                | --             |
| Notched Charpy at +23°C                          | 6       | 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)                       | 205     | °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                                     | --      | --                | --             |
| GWFI at 2 mm                                     | --      | °C                | IEC 60695-2-12 |
| UL94 at 1.6 mm                                   | V1      | --                | UL94           |
| <b>HARDNESS</b>                                  |         |                   |                |
| Hardness Shore D (15 s)                          | --      | Shore D           | ISO 7619-1     |
| <b>ADDITIONAL INFORMATION</b>                    |         |                   |                |
| "^" = additive# 0-9, no effect on material prop. | --      | --                | --             |
| Filler content                                   | 30      | ±2%               | ISO 3451       |
| Mould shrinkage (with flow)                      | 0,3-0,4 | %                 | Polykemi       |
| Mould shrinkage (across flow)                    | 0,7-0,8 | %                 | Polykemi       |
| <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                                | 60-80   | °C                | --             |
| Peripheral screw speed                           | 250-450 | mm/s              | --             |
| Back pressure                                    | 60-100  | bar               | --             |

Stated values in this datasheet are approximate. The values originate, if nothing else is stated, from standardized test specimens in natural color. All information, recommendations and advice, written or verbal, given by an individual company within, or agent affiliated with, The Polykemi Group are according to our 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. Companies within, or agent affiliated with, The Polykemi Group 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. We takes no responsibility for any printing errors.

Values within (): 23°C, 50% RH, 24h

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Further material information is available upon request

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