

## 10005264 AQUAMID 6G25 NAT

Emission date 02/09/2024

AQUAMID 6G25 NAT is a natural color PA6 grade, filled with 25% glass fiber content, suitable for injection moulding applications.

Ed./Rev. 2.0

### DESCRIPTORS

|              |             |                           |
|--------------|-------------|---------------------------|
| Symbol       | ISO 1043    | PA6-GF25                  |
| Designation  | ISO 16396-1 | -PA 6,GF25,MG NR,S14-080N |
| Part Marking | ISO 16396-1 | >PA 6-GF25<               |

| PROPERTIES                    | STANDARD    | CONDITION       | UNIT    | VALUES  |        |
|-------------------------------|-------------|-----------------|---------|---------|--------|
| PHYSICAL PROPERTIES           |             |                 |         | d.a.m.* | cond.* |
| Density                       | ISO 1183    |                 | g/cm3   | 1,31    | -      |
| Melt Volume Rate (MVR)        | ISO 1133    | 275°C x 2,16 kg | cm3/10' | 20      | -      |
| Moisture Absorption           | ISO 62      | 23°C, 1000h     | %       | 1,2-1,5 | -      |
| Moisture Content              | Int. Method |                 | %       | max 0,2 | -      |
| Mold Shrinkage (Longitudinal) | ISO 2577    | 72h,23°C,50% RH | %       | 0,1-0,3 | -      |
| Mold Shrinkage (Transversal)  | ISO 2577    | 72h,23°C,50% RH | %       | 0,5-0,7 | -      |
| MECHANICAL PROPERTIES         |             |                 |         | d.a.m.* | cond.* |
| Tensile Modulus               | ISO 527     | 1 mm/min        | MPa     | 8000    | -      |
| Tensile Strength              | ISO 527     | 50 mm/min       | MPa     | 160     | -      |
| Tensile Stress, Yield         | ISO 527     | 50 mm/min       | MPa     | -       | -      |
| Tensile Strain, Yield         | ISO 527     | 50 mm/min       | %       | -       | -      |
| Tensile Stress, Break         | ISO 527     | 50 mm/min       | MPa     | 160     | -      |
| Tensile Strain, Break         | ISO 527     | 50 mm/min       | %       | 5,3     | -      |
| Flexural Modulus              | ISO 178     | 2 mm/min        | MPa     | -       | -      |
| Flexural Stress, Break/max    | ISO 178     | 2 mm/min        | MPa     | -       | -      |
| Flexural Strain, Break/max    | ISO 178     | 2 mm/min        | %       | -       | -      |
| IMPACT PROPERTIES             |             |                 |         | d.a.m.* | cond.* |
| Charpy, notched               | ISO 179/1eA | +23°C           | kJ/m2   | 11      | -      |
| Charpy, unnotched             | ISO 179/1eU | +23°C           | kJ/m2   | 90      | -      |
| Charpy, notched               | ISO 179/1eA | -30°C           | kJ/m2   | -       | -      |
| Charpy, unnotched             | ISO 179/1eU | -30°C           | kJ/m2   | -       | -      |
| Izod, notched                 | ISO 180/1A  | +23°C           | kJ/m2   | 11      | -      |
| Izod, unnotched               | ISO 180/1U  | +23°C           | kJ/m2   | 70      | -      |
| Izod, notched                 | ISO 180/1A  | -30°C           | kJ/m2   | -       | -      |
| Izod, unnotched               | ISO 180/1U  | -30°C           | kJ/m2   | -       | -      |

#### GENERAL DISCLAIMER

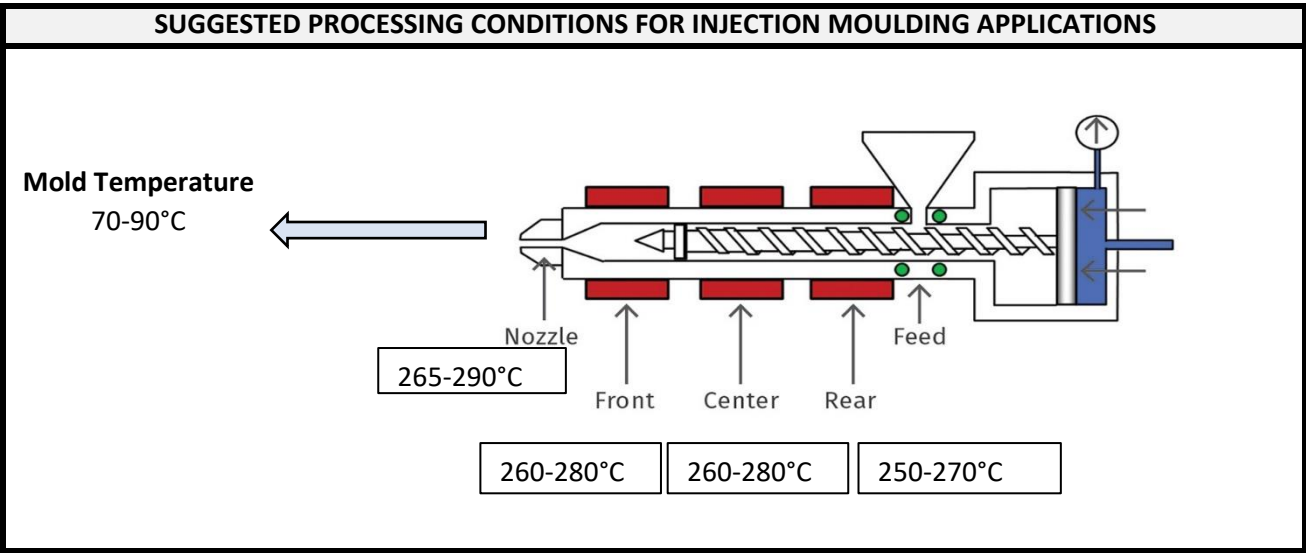
The information provided in this document correspond to our technical knowledge at the date of its publication. This information may be subject to revision at our discretion. Aquafil cannot anticipate all conditions under which this information and/or products of other manufactures in combination with our products may be used. Aquafil accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Aquafil sells the product without warranties. Buyers and users assume all responsibilities and liability for loss or damage arising from handling and use of our product, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.

10005264 AQUAMID 6G25 NAT

Emission date 02/09/2024  
Ed./Rev. 2.0

AQUAMID 6G25 NAT is a natural color PA6 grade, filled with 25% glass fiber content, suitable for injection moulding applications.

| PROPERTIES                       | STANDARD       | CONDITION         | UNIT   | VALUES  |        |
|----------------------------------|----------------|-------------------|--------|---------|--------|
| THERMAL PROPERTIES               |                |                   |        | d.a.m.* | cond.* |
| Crystallization Temperature      | ISO 11357      | 20°C/min, 0-280°C | °C     | -       | -      |
| Melting Temperature              | ISO 11357      | 20°C/min, 0-280°C | °C     | 220     | -      |
| HDT-B                            | ISO 75         | 0,45 MPa          | °C     | >210    | -      |
| HDT-A                            | ISO 75         | 1,80 MPa          | °C     | >180    | -      |
| VICAT                            | ISO 306        | 50°C/h - 50 N     | °C     | >200    | -      |
| RTI, 20000 h                     | ISO 2578       |                   | °C     | -       | -      |
| ELECTRIC PROPERTIES              |                |                   |        | d.a.m.* | cond.* |
| Volume Resistivity               | IEC 62631-3-1  |                   | Ohm*cm | -       | -      |
| Surface Resistivity              | IEC 63631-3-2  |                   | Ohm    | -       | -      |
| Comparative Tracking Index (CTI) | IEC 60112      | Solution A        | V      | 600     | -      |
| FIRE BEHAVIOUR                   |                |                   |        | d.a.m.* | cond.* |
| Flammability                     | UL 94          | -                 | Class  | -       | -      |
| Glow-wire Flammability           | IEC 60695-2-12 | -                 | °C     | -       | -      |
| Burning Speed                    | FMVSS 302      | 2 mm              | mm/min | <100    | -      |



GENERAL DISCLAIMER  
The information provided in this document correspond to our technical knowledge at the date of its publication. This information may be subject to revision at our discretion. Aquafil cannot anticipate all conditions under which this information and/or products of other manufactures in combination with our products may be used. Aquafil accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Aquafil sells the product without warranties. Buyers and users assume all responsibilities and liability for loss or damage arising from handling and use of our product, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.

## **10005264 AQUAMID 6G25 NAT**

**Emission date** 02/09/2024

AQUAMID 6G25 NAT is a natural color PA6 grade, filled with 25% glass fiber content, suitable for injection moulding applications.

**Ed./Rev.** 2.0

### **HINTS**

- It is recommended to dry the material before moulding at 80-90°C for 4-6 h; the suggested maximum moisture content is 0,15%.
- \*d.a.m. specimens are tested dry as moulded, stored at room temperature and 50% RH. Conditioned specimens are tested according to internal method (24h @70°C in DI water + 30min @23°C in DI water).
- Injection moulding parameters have to be considered as a starting guideline and those shall be refined in the intended application, depending on available injection equipment.
- Technical parameters reported are typical of the product under aforementioned testing conditions but may vary according to particular processing conditions applied in the final product manufacturing.

(This document does not require signature as it is produced electronically)

AQUAFIL S.p.A. - Via Linfano, 9 - 38062 Arco (TN) - ITALIA

ISO 9001 e ISO 14001 Certified Quality System

#### GENERAL DISCLAIMER

The information provided in this document correspond to our technical knowledge at the date of its publication. This information may be subject to revision at our discretion. Aquafil cannot anticipate all conditions under which this information and/or products of other manufactures in combination with our products may be used. Aquafil accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Aquafil sells the product without warranties. Buyers and users assume all responsibilities and liability for loss or damage arising from handling and use of our product, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.