Product Information

Ultramid®

STAR SX 218L1 V50 BLACK 38N-K



PA6-GF50

Product description

Ultramid® STAR SX 218L1 V50 BLACK 38N-K is based on a patented high flow polyamide 6 resin, reinforced with 50% glass fibre, heat & improved UV stabilized, for injection moulding. Due to its outstanding flow caracteristics, this grade allows more freedom in mold and part design versus a standard polyamide solution.

Injection Notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point mini -20°C. Recommended time 2-4h

Injection Advice:

 For reinforced polyamides, BASF SE recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or The processing parameters like processing temperatures are a recommendation and can be adjusted in function of

injection machine size, part geometry / design.

Disclaimer

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and it is in no way binding. This information must on no account be used as a substitutive for necessary prior tests which alone can ensure that a product is suitable for a given use. ANY WARRANTY OF PRODUCT PERFORMANCE, MERCHANDABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorizations. Users are requested to check that they are in possession of the latest version of this document, and BASF SE is at their disposal to supply any additional information.

Safety Information

Detailed information regarding safety are available on the safety data sheet (MSDS). MSDS is sent with the first material order or available by contacting our customer services

Regulations Compliance

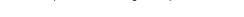
This product is not intended to be used for the following regulated market: food contact, drinking water, toys, cosmetics or medical devices

This grade complies with RoHS Directive 2011/65/EU, 2015/863 and local regulations as amended.

Customer Services

Our customer services are not only concerned with manufacturing and supply of Engineering Plastics products. We are available to assist our customers in finding technical solutions that meet their requirements. Specific support is in particular offered on:

- Material selection
- Material testing
- Parts design advice, training for design engineers
- Part testing
- Design simulation - Processing through different technologies
- Assembly and post-processing technology expertise
- Parts optimization through Computer Aided Design







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Product Information

| | - | BASF |
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| We | creat | e chemistry |

| Typical values for uncoloured product at 23 °C ¹⁾ | Test method | Unit | Values ²⁾ | | |
|---|--|---|--|--|--|
| General Properties | | | | | |
| Asia Pacific Processing: Injection moulding (M), Extrusion (E), Blow moulding (B) Colour; black (bk), uncoloured (un), coloured (co), transparent (tr) | | - | + M bk | | |
| Physical | | | | | |
| Water absorption, 24 h in water, 23 °C Density | ISO 62 ISO 1183 | % kg/m³ | 0.7 1560 / - | | |
| Mechanical properties dry / cond. | | | | | |
| Tensile modulus Stress at break Tensile Strength at Break (ASTM) Strain at break Flexural modulus Flexural strength Charpy notched impact strength ISO 179/1eA (23°C) Charpy impact strength ISO 179-1eU (23°C) | ISO 527-1/-2 ISO 527-1/-2 ASTM D 638 ISO 527-1/-2 ISO 178 ISO 178 ISO 179/1eA ISO 179/1eU | MPa MPa % MPa MPa kJ/m ² kJ/m ² | 17500 / 11000 220 / 140 210 / - 2.8 / 4.4 15000 / 10000 300 / - 13 / 20 80 / 90 | | |
| Thermal properties | | | | | |
| HDT A (1.80 MPa) HDT A (1.82 MPa), ASTM Melting temperature, DSC (10°C/min) | ISO 75-1/-2 ASTM D 648 ISO 11357-1/-3 | ວ° ວ° ວ° | 210 209 220 | | |
| Flammability | | | | | |
| Burning Behav. at thickness 3.2 mm | IEC 60695-11-10 | class | HB | | |
| Injection | | | | | |
| Pre/Post-processing, Pre-drying, Temperature Pre/Post-processing, max. allowed water content Injection molding cylinder temperature 1 (feed zone) Injection molding cylinder temperature 2 (compression) Injection molding cylinder temperature 3 (metering-zone, head room of screw) injection molding, Mold temperature, range | - - - - ISO 294 | ဝံ ဝံ ဝံ လံ ဂံ ဂံ ဝံ လိ ဝံ | 80 0.2 230 - 235 235 - 245 245 - 250 80 - 100 | | |



