

FRIANYL® A3 W V0E BK 9011/O

FRIANYL®

Designed for automotive applications requiring self-extinguishing properties combined with easy processability and good surface quality.

Product information

| | | |
|--------------------------------|---------------------|-------------|
| Resin Identification | (PA66+PA6) FR(30) | ISO 1043 |
| Part Marking Code | >(PA66+PA6) FR(30)< | ISO 11469 |
| Continuous Service Temperature | 130 °C | IEC 60216-1 |

Rheological properties

| | dry/cond. | | |
|------------------------------------|-----------|--------------------|-----------------|
| Viscosity number | 120/* | cm ³ /g | ISO 307, 1628 |
| Moulding shrinkage, parallel | 1.2/- | % | ISO 294-4, 2577 |
| Moulding shrinkage range, parallel | 1 - 1.4 | % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 1.2/- | % | ISO 294-4, 2577 |
| Moulding shrinkage range, normal | 1 - 1.4 | % | ISO 294-4, 2577 |

Typical mechanical properties

| | dry/cond. | | |
|--------------------------------------|-----------------------|-------------------|--------------|
| Tensile modulus | 3300/- | MPa | ISO 527-1/-2 |
| Tensile stress at yield, 50mm/min | 65/- | MPa | ISO 527-1/-2 |
| Tensile strain at break, 50mm/min | 2.5/- | % | ISO 527-1/-2 |
| Charpy impact strength, 23°C | 30/- | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, 23°C | 2.7/- | kJ/m ² | ISO 179/1eA |
| Poisson's ratio | 0.37/- ^[C] | | |

[C]: Calculated

Thermal properties

| | dry/cond. | | |
|--|-----------|----|----------------|
| Melting temperature, 10°C/min | 260/* | °C | ISO 11357-1/-3 |
| Temperature of deflection under load, 1.8 MPa | 80/* | °C | ISO 75-1/-2 |
| Temperature of deflection under load, 0.45 MPa | 190/* | °C | ISO 75-1/-2 |
| Ball pressure test | 175/- | °C | IEC 60695-10-2 |

Flammability

| | dry/cond. | | |
|--------------------------------------|-----------|-------|----------------------|
| Burning Behav. at 1.5mm nom. thickn. | V-0/* | class | IEC 60695-11-10 |
| Thickness tested | 1.5/* | mm | IEC 60695-11-10 |
| UL recognition | yes/* | | UL 94 |
| Burning Behav. at thickness h | V-0/* | class | IEC 60695-11-10 |
| Thickness tested | 0.4/* | mm | IEC 60695-11-10 |
| UL recognition | yes/* | | UL 94 |
| Glow Wire Flammability Index, 0.75mm | 960/- | °C | IEC 60695-2-12 |
| Glow Wire Flammability Index, 3.0mm | 960/- | °C | IEC 60695-2-12 |
| FMVSS Class | SE | | ISO 3795 (FMVSS 302) |

Electrical properties

| | dry/cond. | | |
|---------------------------------------|-----------|-------|---------------|
| Volume resistivity | 1E12/- | Ohm.m | IEC 62631-3-1 |
| Comparative tracking index, 100 drops | 600 | | IEC 60112 |

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Physical/Other properties

| | dry/cond. | | |
|--------------------------|-----------|-------------------|----------------|
| Humidity absorption, 2mm | 2.1 / * | % | Sim. to ISO 62 |
| Water absorption, 2mm | 7.4 / * | % | Sim. to ISO 62 |
| Density | 1160 / - | kg/m ³ | ISO 1183 |

Characteristics

| | |
|-------------------------|---|
| Processing | Injection Moulding |
| Delivery form | Granules |
| Additives | Flame retardant, Non-halogenated/Red phosphorous free flame retardant |
| Special characteristics | Flame retardant, Heat stabilised or stable to heat |