

## HOSTAFORM® C 9021 GV3/10 - POM

### Beschreibung

Chemische Kurzbezeichnung nach ISO 1043-1: POM Formmasse ISO 9988- POM-K, M-GNR, 03-002, GB10 POM-Copolymer Spritzgießtyp mit ca. 10 % Glaskugeln verstärkt; hoher Widerstand gegen thermischen und oxidativen Abbau. UL-Registrierung in natur ab 0,81 mm, in schwarz ab 1,5 mm Dicke als UL94 HB. Temperatur-Index UL 746 B bei 2 mm Dicke, elektrisch 105 °C, mechanisch 95 °C (Schlagzug), 100 °C (Zug). Brenngeschwindigkeit ISO 3795 und FMVSS 302 < 100 mm/min ab 1 mm Dicke. Anwendungen: Für verzugsarme Formteile mit angehobener Steifigkeit und Härte. FMVSS = Federal Motor Vehicle Safety Standard (USA) UL = Underwriters Laboratories (USA)

| Physikalische Eigenschaften           | Wert | Einheit   | Test Standard   |
|---------------------------------------|------|-----------|-----------------|
| Dichte                                | 1470 | kg/m³     | ISO 1183        |
| Schmelzevolumenrate, MVR              | 9    | cm³/10min | ISO 1133        |
| MVR temperatur                        | 190  | °C        | ISO 1133        |
| MVR belastung                         | 2,16 | kg        | ISO 1133        |
| Verarbeitungsschwindigkeit, parallel  | 2,0  | %         | ISO 294-4, 2577 |
| Verarbeitungsschwindigkeit, senkrecht | 1,7  | %         | ISO 294-4, 2577 |
| Wasseraufnahme, 23 °C-Sätt            | 0,8  | %         | ISO 62          |
| Feuchtigkeitsaufnahme, 23 °C/50%RH    | 0,15 | %         | ISO 62          |

| Mechanische Eigenschaften          | Wert | Einheit | Test Standard |
|------------------------------------|------|---------|---------------|
| Zug-Modul                          | 3100 | MPa     | ISO 527-2/1A  |
| Streckspannung, 50mm/min           | 52   | MPa     | ISO 527-2/1A  |
| Streckdehnung, 50mm/min            | 7,5  | %       | ISO 527-2/1A  |
| Nominelle Bruchdehnung, 50mm/min   | 17   | %       | ISO 527-2/1A  |
| Zug-Kriechmodul, 1h                | 2800 | MPa     | ISO 899-1     |
| Zug-Kriechmodul, 1000h             | 1500 | MPa     | ISO 899-1     |
| Biegemodul, 23 °C                  | 3000 | MPa     | ISO 178       |
| Charpy-Schlagzähigkeit, +23 °C     | 60   | kJ/m²   | ISO 179/1eU   |
| Charpy-Schlagzähigkeit, -30 °C     | 60   | kJ/m²   | ISO 179/1eU   |
| Charpy-Kerbschlagzähigkeit, +23 °C | 4    | kJ/m²   | ISO 179/1eA   |
| Charpy-Kerbschlagzähigkeit, -30 °C | 4    | kJ/m²   | ISO 179/1eA   |
| Kugeleindruckhärte, 30s            | 160  | MPa     | ISO 2039-1    |

| Thermische Eigenschaften                 | Wert | Einheit | Test Standard  |
|------------------------------------------|------|---------|----------------|
| Schmelztemperatur, 10 °C/min             | 166  | °C      | ISO 11357-1/-3 |
| Formbeständigkeitstemperatur, 1.80 MPa   | 108  | °C      | ISO 75-1, -2   |
| Vicat-Erweichungstemperatur, 50 °C/h 50N | 151  | °C      | ISO 306        |
| Längenausdehnungskoeffizient, parallel   | 1,1  | E-4/°C  | ISO 11359-2    |
| Brennbarkeit bei nominal 1.6mm           | HB   | class   | UL 94          |
| geprüfte Probekörperdicke (1.6)          | 1,5  | mm      | UL 94          |
| UL Registrierung (1.6)                   | UL   | -       | UL 94          |
| Brennbarkeit bei Dicke h                 | HB   | class   | UL 94          |
| geprüfte Probekörperdicke (h)            | 0,81 | mm      | UL 94          |
| UL Registrierung                         | UL   | -       | UL 94          |

| Elektrische Eigenschaften           | Wert | Einheit | Test Standard |
|-------------------------------------|------|---------|---------------|
| Dielektrizitätszahl, 100Hz          | 4,3  | -       | IEC 60250     |
| Dielektrizitätszahl, 1MHz           | 4,1  | -       | IEC 60250     |
| Dielektrischer Verlustfaktor, 100Hz | 150  | E-4     | IEC 60250     |
| Dielektrischer Verlustfaktor, 1MHz  | 60   | E-4     | IEC 60250     |
| Spezifischer Durchgangswiderstand   | 1E12 | Ohm*m   | IEC 60093     |
| Spezifischer Oberflächenwiderstand  | 1E14 | Ohm     | IEC 60093     |
| Elektrische Durchschlagfestigkeit   | 35   | kV/mm   | IEC 60243-1   |
| Vergleichszahl der Kriechwegbildung | 600  | -       | IEC 60112     |

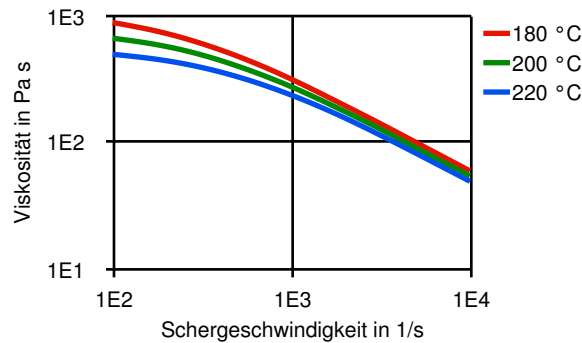
| Kennwerte f. rheologische Berechn. | Wert  | Einheit | Test Standard |
|------------------------------------|-------|---------|---------------|
| Dichte der Schmelze                | 1250  | kg/m³   | Internal      |
| Wärmeleitfähigkeit der Schmelze    | 0,195 | W/(m K) | Internal      |

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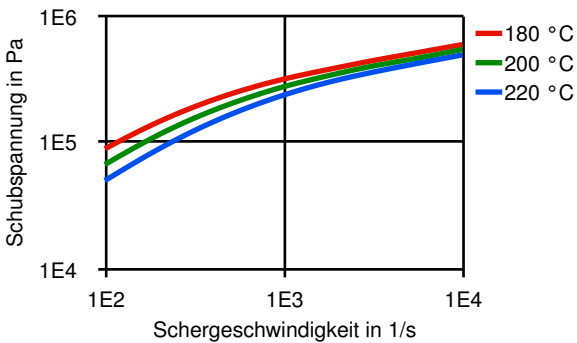
|                                   |      |          |          |
|-----------------------------------|------|----------|----------|
| Spez. Wärmekapazität der Schmelze | 1870 | J/(kg K) | Internal |
| Entformungstemperatur             | 140  | °C       | Internal |

Diagramme

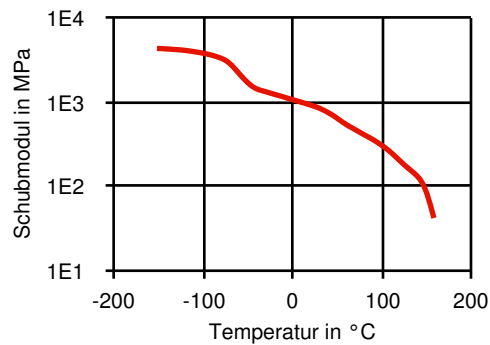
Viskosität-Schergeschwindigkeit



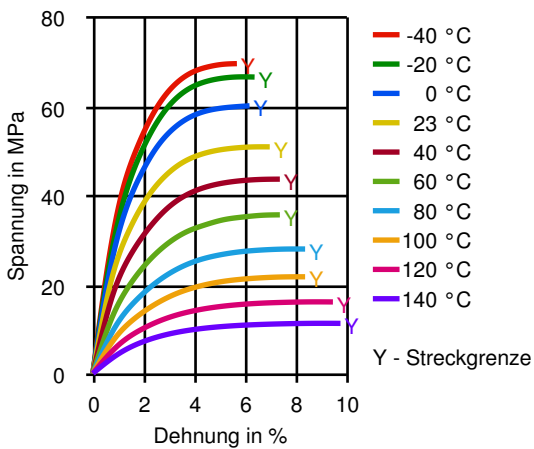
Schubspannung-Schergeschwindigkeit



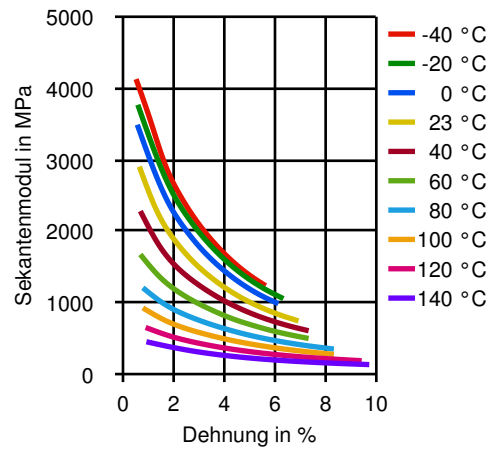
Dynamischer Schubmodul-Temperatur



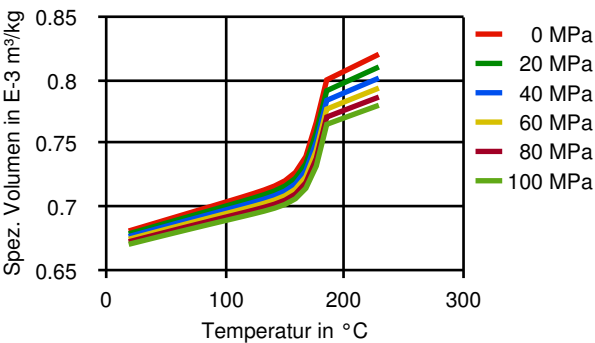
Spannung-Dehnung



Sekantenmodul-Dehnung



Moldflow Spezifisches Volumen-Temperatur (pvT)



Typische Spitzgußbedingungen

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| <b>Vortrocknung</b>                   | <b>Wert</b> | <b>Einheit</b> | <b>Test Standard</b> |
|---------------------------------------|-------------|----------------|----------------------|
| Max. zulässige Restfeuchte            | 0,15        | %              | -                    |
| Trocknungszeit                        | 3 - 4       | h              | -                    |
| Trocknungstemperatur                  | 100 - 120   | °C             | -                    |
| <b>Verarbeitungstemperaturen</b>      | <b>Wert</b> | <b>Einheit</b> | <b>Test Standard</b> |
| Trichtertemperatur                    | 20 - 30     | °C             | -                    |
| Temperatur in der Einzugszone         | 60 - 80     | °C             | -                    |
| Zone1 Temperatur                      | 170 - 180   | °C             | -                    |
| Zone2 Temperatur                      | 180 - 190   | °C             | -                    |
| Zone3 Temperatur                      | 190 - 200   | °C             | -                    |
| Zone4 Temperatur                      | 190 - 210   | °C             | -                    |
| Düsentemperatur                       | 190 - 210   | °C             | -                    |
| Massetemperatur                       | 190 - 230   | °C             | -                    |
| Werkzeugtemperatur                    | 80 - 120    | °C             | -                    |
| Heißkanaltemperatur                   | 190 - 210   | °C             | -                    |
| <b>Verarbeitungsdrücke</b>            | <b>Wert</b> | <b>Einheit</b> | <b>Test Standard</b> |
| Staudruck                             | 20          | bar            | -                    |
| <b>Verarbeitungsgeschwindigkeiten</b> | <b>Wert</b> | <b>Einheit</b> | <b>Test Standard</b> |
| Einspritzgeschwindigkeit              | slow        | -              | -                    |
| <b>Schneckendrehzahlen</b>            | <b>Wert</b> | <b>Einheit</b> | <b>Test Standard</b> |
| Schneckendrehzahl, 25mm               | 150         | RPM            | -                    |
| Schneckendrehzahl, 40mm               | 100         | RPM            | -                    |
| Schneckendrehzahl, 55mm               | 70          | RPM            | -                    |

### Weitere Informationen

#### Pre-drying

Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.

#### Verlängerte Trocknungszeiten / Lagerung

The product can then be stored in standard conditions until processed.

#### Spritzgießen

Auf handelsüblichen Spritzgießmaschinen mit 15-25 D langen Dreizonen-Schnecken verarbeitbar.

### Merkmale

| <b>Produktkategorien</b>     | <b>Lieferformen</b>    |
|------------------------------|------------------------|
| Glasverstärkt                | Granulat               |
| <b>Verarbeitungsmethoden</b> | <b>Additive</b>        |
| Spritzgießen                 | Entformungshilfsmittel |
| <b>Regularien</b>            |                        |
| Trinkwasserzulassung         |                        |

**Kontakt**

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**Allgemeine Haftungsausschlußerklärung**

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