

HOSTAFORM® S 9362 XAP2™ | POM | Impact Modified

Description

Preliminary Data Sheet

Hostaform® acetal copolymer grade S 9362 XAP2™ is an impact modified grade for applications requiring improved impact. Hostaform® S 9362 XAP2™ provides good impact strength while improving modulus and weld line strength over standard impact modified grades such as Hostaform® S 9063, and also exhibits exceptional low emission performance meeting or exceeding the requirements of many automotive markets.

Chemical abbreviation according to ISO 1043-1: POM-HI

| Physical properties | Value | Unit | Test Standard |
|-----------------------------|-------------|------------------------|---------------|
| Density | 1390 | kg/m ³ | ISO 1183 |
| Melt volume rate (MVR) | 6.5 | cm ³ /10min | ISO 1133 |
| MVR test temperature | 190 | °C | ISO 1133 |
| MVR test load | 2.16 | kg | ISO 1133 |
| Mold shrinkage - parallel | 1.9 | % | ISO 294-4 |
| Mold shrinkage - normal | 1.8 | % | ISO 294-4 |
| Water absorption (23°C-sat) | 0.8 | % | ISO 62 |

| Mechanical properties | Value | Unit | Test Standard |
|--|--------------|-------------------|---------------|
| Tensile modulus (1mm/min) | 2300 | MPa | ISO 527-2/1A |
| Tensile stress at yield (50mm/min) | 55 | MPa | ISO 527-2/1A |
| Tensile strain at yield (50mm/min) | 10 | % | ISO 527-2/1A |
| Flexural modulus (23°C) | 2200 | MPa | ISO 178 |
| Charpy impact strength @ 23°C | NB | kJ/m ² | ISO 179/1eU |
| Charpy impact strength @ -30°C | 190.0 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength @ 23°C | 10.0 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength @ -30°C | 6.0 | kJ/m ² | ISO 179/1eA |

| Thermal properties | Value | Unit | Test Standard |
|---|------------|--------|-------------------|
| Melting temperature (10°C/min) | 166 | °C | ISO 11357-1,-2,-3 |
| DTUL @ 1.8 MPa | 87 | °C | ISO 75-1/-2 |
| DTUL @ 0.45 MPa | 151 | °C | ISO 75-1/-2 |
| Coeff.of linear therm. expansion (parallel) | 1.1 | E-4/°C | ISO 11359-2 |
| Coeff.of linear therm. expansion (normal) | 1.1 | E-4/°C | ISO 11359-2 |

| Test specimen production | Value | Unit | Test Standard |
|--------------------------------|---------------|------|---------------|
| Processing conditions acc. ISO | 9988-2 | - | Internal |

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Typical injection moulding processing conditions



Pre Drying:

Drying is suggested to help achieve low emission performance and to counter if material has contacted moisture through improper storage and handling.

Drying time: 3 h

Drying temperature: 80 - 100 °C

Temperature:

| | $\varnothing_{\text{Mold}}$ | $\varnothing_{\text{Melt}}$ | $\varnothing_{\text{Nozzle}}$ | $\varnothing_{\text{Zone4}}$ | $\varnothing_{\text{Zone3}}$ | $\varnothing_{\text{Zone2}}$ | $\varnothing_{\text{Zone1}}$ |
|----------|-----------------------------|-----------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| min (°C) | 80 | 180 | 180 | 180 | 180 | 180 | 170 |
| max (°C) | 120 | 200 | 200 | 200 | 190 | 190 | 180 |

Pressure:

| | Inj press | Hold press | Back pressure |
|-----------|-----------|------------|---------------|
| min (bar) | 600 | 600 | 0 |
| max (bar) | 1200 | 1200 | 5 |

Speed:

Injection speed: slow

Special Info:

Do not heat over 205 C (~400 F) to avoid burning and discoloring product.

Contact Information

Americas

Ticona North American Headquarters
Product Information Service
8040 Dixie Highway
Florence, KY 41042
USA
Tel.: +1-800-833-4882
Tel.: +1-859-372-3244
email: prodinfo@ticona.com
Ticona on the web: www.ticona.com

Europe

Ticona GmbH
Information Service
Tel.: +49 (0) 180-5842662 (Germany)
+49 (0) 69-30516299 (Europe)
Fax: +49 (0) 180-2021202 (Germany & Europe)
email: infoservice@ticona.de
Internet: www.ticona.com

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Customer Service

Tel.: +1-800-526-4960

Tel.: +1-859-372-3214

Fax: +1-859-372-3125

General Disclaimer

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colorants or other additives may cause significant variations in data values.

Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use.

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We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed (+49 (0) 69 30516299 for Europe and +1 859-372-3244 for the Americas) for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

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