

NAN YA FR-PA66 MATERIAL SPECIFICATION

GRADE: 6512 ENC1 – Super Toughness NYLON66

| PROPERTIES | | TEST METHOD | UNIT | VALUE | REFERENCE MOLDING CONDITIONS | | | |
|---------------|---|-------------|--------------------|------------------|--|--------------------|-----------|----------|
| 1. Physical | Tensile Strength at Yield | ASTM D638 | Kg/cm ² | 500 | Drying Time | Hrs | 4 | |
| | Elongation | ASTM D638 | % | ---- | Drying Temp. | °C | 80 | |
| | Flexural Strength | ASTM D790 | Kg/cm ² | 650 | Cylinder Temp Rear | °C | 250 | |
| | Flexural Modulus | ASTM D790 | Kg/cm ² | 16000 | Center | °C | 260 | |
| | IZOD Impact(23°C) | | | | | Front | °C | 270 |
| | | | | | | (-20°C) | ASTM D256 | Kg-cm/cm |
| | (Notched 18) (-40°C) | | | | | Mold Temp. | °C | 60 |
| | Rockwell Hardness | ASTM D785 | R-Scale | 105 | Injection Press | Kg/cm ² | 450-1400 | |
| 2. Thermal | Melting Point | DSC | °C | 260 | Screw Rotation | rpm | 180 | |
| | H.D.T(18.6Kg/cm ²) | ASTM D648 | °C | 60 | Speed. | | | |
| | Melting Flow Index(MFI) | ASTM D1238 | g/10 min | 20 | Injection Speed | -- | fast | |
| | | | | | | | | |
| 3. Electrical | Volume Resistivity | ASTM D257 | Ω · cm | 10 ¹⁵ | <div style="border: 1px solid black; padding: 5px;"> Injection M/C: 2 OZ ES 50/150 Mold: ASTM Test Bar Gate Size: 5.8x1.2 mm Test Bar Thickness: 3.2 mm Test Condition: 23°C , 50%RH </div> | | | |
| | Dielectric Strength | ASTM D149 | KV/mm | ---- | | | | |
| | Dielectric Constant(10 ⁶ Hz) | ASTM D150 | -- | 2.7 | | | | |
| | Dissipation Factor(10 ⁶ Hz) | ASTM D150 | -- | 0.016 | | | | |
| | Arc Resistance | ASTM D495 | sec. | 150 | | | | |
| 4. Other | Specific Gravity | ASTM D792 | -- | 1.05 | NAN YA PLASTICS CORPORATION | | | |
| | Mold Shrinkage(MD) | 3 mm t | % | 1.2 | | | | |
| | Mold Shrinkage(TD) | 3 mm t | % | 1.5 | | | | |
| | Flammability | UL 94 | -- | ---- | | | | |
| | Remarks | | | | | | | |

▲Melting Flow Index Test Condition: 275°Cx2.16 kg ◦

Datasheet

| | | |
|--|--|-------------------------------------|
| Compound name: | TC4PAN | |
| Development name: | HTC8863/13 | |
| Colour: | natural | |
| Hardness: | 40.0 Shore A | DIN 53505 / ISO 868 |
| Density: | 1.15 g/cm ³ | DIN EN ISO 1183-1:2004 |
| Tensile strength: | 2.5 N/mm ² | DIN 53504 / ISO 37 |
| Elongation at break: | 400.0 % | DIN 53504 / ISO 37 |
| Tear resistance: | 12.0 N/mm | DIN ISO 34-1 Methode B (b) (Graves) |
| Module: | 0.9 MPa | DIN 53504 / ISO 37 |
| | 1.5 MPa | DIN 53504 / ISO 37 |
| | 1.9 MPa | DIN 53504 / ISO 37 |
| Processing method: | Coinjection Moulding | |
| Shrinkage | | |
| Injection moulded plaque, 125 x 125 x 2mm center gate: | 1.7 % | |
| Hard-/soft with | | |
| PA 6: | tested, values on demand | |
| PA 6.6: | tested, values on demand | |
| Indoor/outdoor: | Indoor | |
| Certifications and Approvals: | UL 94 HB: "Yellow Card" (fire test according to UL standard) | |

Remark

The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The results of our tests are determined by sample check and mean only a technical description of our products. It shall not absolve the customer of the responsibility to make tests for his intended process or purpose. Therefore, KRAIBURG TPE makes no warranties and assumes no liability in connection with any use of this information.

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Remarks:

Good weather resistance, 3000 MJ/m²
in suntester, dE 3.5

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