

# RTP 4089 HB

Polyphthalamide

RTP Company

Message:

Carbon Fiber

| General Information                                     |                                                        |                   |             |
|---------------------------------------------------------|--------------------------------------------------------|-------------------|-------------|
| Filler / Reinforcement                                  | Carbon fiber reinforced material, 50% filler by weight |                   |             |
| RoHS Compliance                                         | Contact manufacturer                                   |                   |             |
| Processing Method                                       | Injection molding                                      |                   |             |
| Physical                                                | Nominal Value                                          | Unit              | Test Method |
| Specific Gravity                                        | 1.44                                                   | g/cm <sup>3</sup> | ASTM D792   |
| Molding Shrinkage - Flow (3.20 mm)                      | 0.050 - 0.10                                           | %                 | ASTM D955   |
| Moisture Content                                        | 0.050                                                  | %                 |             |
| Primary Additive                                        | 50                                                     | %                 |             |
| Mechanical                                              | Nominal Value                                          | Unit              | Test Method |
| Tensile Modulus                                         | 41400                                                  | MPa               | ASTM D638   |
| Tensile Strength                                        | 290                                                    | MPa               | ASTM D638   |
| Tensile Elongation (Yield)                              | 1.0                                                    | %                 | ASTM D638   |
| Flexural Modulus                                        | 34500                                                  | MPa               | ASTM D790   |
| Flexural Strength                                       | 427                                                    | MPa               | ASTM D790   |
| Impact                                                  | Nominal Value                                          | Unit              | Test Method |
| Notched Izod Impact (3.20 mm)                           | 69                                                     | J/m               | ASTM D256   |
| Unnotched Izod Impact (3.20 mm)                         | 640                                                    | J/m               | ASTM D4812  |
| Thermal                                                 | Nominal Value                                          | Unit              | Test Method |
| Deflection Temperature Under Load (1.8 MPa, Unannealed) | 277                                                    | °C                | ASTM D648   |
| Electrical                                              | Nominal Value                                          | Unit              | Test Method |
| Volume Resistivity                                      | < 10                                                   | ohms · cm         | ASTM D257   |
| Flammability                                            | Nominal Value                                          | Unit              | Test Method |
| Flame Rating (1.50 mm)                                  | HB                                                     |                   | UL 94       |
| Injection                                               | Nominal Value                                          | Unit              |             |
| Drying Temperature                                      | 107                                                    | °C                |             |
| Drying Time                                             | 4.0 - 6.0                                              | hr                |             |
| Dew Point                                               | -31.7                                                  | °C                |             |
| Processing (Melt) Temp                                  | 302 - 329                                              | °C                |             |
| Mold Temperature                                        | 135 - 163                                              | °C                |             |
| Injection Pressure                                      | 68.9 - 124                                             | MPa               |             |
| Injection instructions                                  |                                                        |                   |             |

Desiccant Type Dryer Required.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519  
Phone: +86 13424755533  
Email: sales@su-jiao.com  
No. 215, Lianhe North Road, Fengxian District, Shanghai, China

