



## **DIAREX TMF35**

General Purpose Polystyrene Resin

Special Characteristics: TMF35 is the general purpose polystyrene with balance flow ability, strength, and good clarity. This grade is recommended for injection applications.

Typical Applications: Refrigerator accessories, Home appliance, Food container, Stationary

Typical Properties:

| Physical Properties           Melt Flow Rate (200 °C, 5 kg)         4.5         g/10 min         ASTM D1238           Density         1.05         g/cm³         ASTM D792           Vicat Softening Point         104         °C         ASTM D1525           Deflection Temperature         79         °C         ASTM D648           Mechanical Properties           Tensile Strength at Yield         6,900         Ib/in²         ASTM D638           Tensile Floogration         2.0         %         ASTM D638 | Properties                    | DIAREX TMF35 | Unit                 | Test Method |
|--|-------------------------------|--------------|----------------------|-------------|
| Density 1.05 g/cm³ ASTM D792 Vicat Softening Point 104 °C ASTM D1525 Deflection Temperature 79 °C ASTM D648  Mechanical Properties  Tensile Strength at Yield 6,900 Ib/in² ASTM D638   | Physical Properties           |              |                      |             |
| Vicat Softening Point 104 °C ASTM D1525 Deflection Temperature 79 °C ASTM D648  Mechanical Properties  Tensile Strength at Yield 6,900 Ib/in² ASTM D638  | Melt Flow Rate (200 °C, 5 kg) | 4.5          | g/10 min             | ASTM D1238  |
| Deflection Temperature 79 °C ASTM D648  Mechanical Properties  Tensile Strength at Yield 6,900 Ib/in² ASTM D638  | Density                       | 1.05         | g/cm <sup>3</sup>    | ASTM D792   |
| Mechanical Properties  Tensile Strength at Yield 6,900 Ib/in² ASTM D638  | Vicat Softening Point         | 104          | °C                   | ASTM D1525  |
| Tensile Strength at Yield 6,900 Ib/in <sup>2</sup> ASTM D638   | Deflection Temperature        | 79           | $^{\circ}\mathrm{C}$ | ASTM D648   |
| Tensile Strength at Yield 6,900 Ib/in <sup>2</sup> ASTM D638   |                               |              |                      |             |
|  | Mechanical Properties         |              |                      |             |
| Tensile Florgation 20 % ASTM D638  | Tensile Strength at Yield     | 6,900        | lb/in <sup>2</sup>   | ASTM D638   |
| Totalio Elongation   | Tensile Elongation            | 2.0          | %                    | ASTM D638   |
| Izod Impact Strength 0.4 ft.lb/in ASTM D256  | Izod Impact Strength          | 0.4          | ft.lb/in             | ASTM D256   |
| Rockwell Hardness M80 Scale ASTM D785  | Rockwell Hardness             | M80          | Scale                | ASTM D785   |
| Underwriter Laboratory* HB (1.5 mm) UL-94  | Underwriter Laboratory*       | HB (1.5 mm)  |                      | UL-94       |

## Recommendation:

DIAREX TMF35 can be processed with recommended temperature between 190 – 240  $^{\circ}$ C and mold temperatures between 30 and 70  $^{\circ}$ C. Melt temperature should not exceed 260  $^{\circ}$ C.

Note: Modifications of the processing conditions based on the variations of the product design and machine configuration.

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Note: Properties reported here are typical values of the product, not to be considered as specifications. GC makes no representations as to the accuracy or completeness of the information contained herein.

<sup>\*</sup>Data based on injection molding test pieces.