

# PRODUCT INFORMATION

Metric & SI unit

Acetal Copolymer

# KEPITAL®

KOREA ENGINEERING PLASTICS CO.,LTD.

## F10-03H

A high viscosity grade for general injection molding with high stiffness. It has improved on thermal stability.

| Property                           | Test Method | Units  | Value              |
|------------------------------------|-------------|--|--------------------|
| <b>Physical</b>                    |             |  |                    |
| Specific Gravity                   | ASTM D792   | –  | 1.41               |
| Water Absorption                   | ASTM D570   | %  | 0.22               |
| <b>Thermal</b>                     |             |  |                    |
| Melt Index                         | ASTM D1238  | g/10min  | 2.5                |
| Melting Point                      | ASTM D3418  | °C   | 165                |
| Heat Deflection Temperature        | ASTM D648   | °C   |                    |
|                                    |             |  |                    |
|                                    |             |  |                    |
| Coeff. of Linear Thermal Expansion | ASTM D696   | $\times 10^{-5}$ cm/cm/°C                            | 13                 |
| Flammability                       | UL94        | –  | HB                 |
| <b>Mechanical</b>                  |             |  |                    |
| Tensile Strength                   | ASTM D638   | kg <sub>f</sub> /cm <sup>2</sup> (MPa)               | 650 (64)           |
| Tensile Elongation                 | ASTM D638   | %  | 40                 |
| Flexural Strength                  | ASTM D790   | kg <sub>f</sub> /cm <sup>2</sup> (MPa)               | 880 (86)           |
| Flexural Modulus                   | ASTM D790   | $\times 10^4$ kg <sub>f</sub> /cm <sup>2</sup> (MPa) | 2.66 (2,660)       |
| Shear Strength                     | ASTM D732   | kg <sub>f</sub> /cm <sup>2</sup> (MPa)               |                    |
| Notched Izod Impact Strength       | ASTM D256   | kg <sub>f</sub> · cm/cm (J/m)                        | 7.0 (69)           |
| Rockwell Hardness                  | ASTM D785   | –  |                    |
| <b>Electrical</b>                  |             |  |                    |
| Dielectric Constant                | ASTM D150   | –  | 3.7                |
| Dielectric Dissipation Factor      | ASTM D150   | –  | 0.007              |
| Surface Resistivity                | ASTM D257   | Ω  | $1 \times 10^{16}$ |
| Volume Resistivity                 | ASTM D257   | Ω · cm   | $1 \times 10^{14}$ |
| Dielectric Strength                | ASTM D149   | kV/mm  | 19                 |
| Molding Shrinkage (//Direction)    |             | %  | 2.0                |

**Properties are subject to change with a new knowledge and development.**

Although the information and recommendations set forth herein are presented in good faith and believed to be correct, we recommend that persons receiving information must make their own determination as to its suitability to their purposes prior to use. These are based on natural colored products only through relevant test methods and conditions. The KOREA ENGINEERING PLASTICS CO., LTD. assumes no warranty or liability of, express or implied, as to the accuracy or completeness thereof, or any other nature regarding designs, products, or information may be used without infringing the intellectual property rights of others. Further, the data furnished by KEP are not intent to replace any testing required to determine a suitability of any application and set a specification limit for design.

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| <b>Thermal</b>                     |             |   |                    |
| Melt Index                         | ASTM D1238  | g/10min   | 2.5                |
| Melting Point                      | ASTM D3418  | °C (°F)   | 165 (329)          |
| Heat Deflection Temperature        | ASTM D648   | °C (°F)   |                    |
|                                    |             |   |                    |
|                                    |             |   |                    |
| Coeff. of Linear Thermal Expansion | ASTM D696   | $\times 10^{-5}$ cm/cm/°C   | 13                 |
| Flammability                       | UL94        | –   | HB                 |
| <b>Mechanical</b>                  |             |   |                    |
| Tensile Strength                   | ASTM D638   | kg <sub>f</sub> /cm <sup>2</sup> (psi)                              | 650 (9,300)        |
| Tensile Elongation                 | ASTM D638   | %   | 40                 |
| Flexural Strength                  | ASTM D790   | kg <sub>f</sub> /cm <sup>2</sup> ( $\times 10^3$ psi)               | 880 (12.6)         |
| Flexural Modulus                   | ASTM D790   | $\times 10^4$ kg <sub>f</sub> /cm <sup>2</sup> ( $\times 10^4$ psi) | 2.66 (37.8)        |
| Shear Strength                     | ASTM D732   | kg <sub>f</sub> /cm <sup>2</sup> (psi)                              |                    |
| Notched Izod Impact Strength       | ASTM D256   | kg <sub>f</sub> · cm/cm(ft · lb/in)                                 | 7.0 (1.3)          |
| Rockwell Hardness                  | ASTM D785   | –   |                    |
| <b>Electrical</b>                  |             |   |                    |
| Dielectric Strength                | ASTM D150   | –   | 3.7                |
| Dielectric Dissipation Factor      | ASTM D150   | –   | 0.007              |
| Surface Resistivity                | ASTM D257   | Ω   | $1 \times 10^{16}$ |
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