

## NYCOA 5015 FR

**15% Glass-Fiber Reinforced, Flame Retardant, Nylon 66 Resin.**

**NYCOA 5015 FR** is a 15% glass fiber reinforced, flame retardant Nylon 66 resin used for injection molding. The flame retardant system is specially formulated for UL 94 VO rating at 0.75 mm thickness.

**NYCOA 5015 FR** is available in custom colors, and impact modified grades. It also has excellent chemical resistance to greases, oils, and other hydrocarbons.

**NYCOA 5015 FR** is suitable for injection molding and can be found in applications in the hardware, electrical coil bobbins, switches, connectors, relay housings, and other automotive applications.

| Property  | Method | English     |         | SI   |       |
|---|--------|-------------|---------|------|-------|
|   |        | Unit        | Value   | Unit | Value |
| <b>Physical Properties</b>  |        |             |         |      |       |
| Specific Gravity  | D 792  | -           | 1.24    | -    | 1.24  |
| Water Absorption, 24 hr   | D 570  | %           | 0.9     | %    | 0.9   |
| Linear Mold Shrinkage (Parallel)  | D 955  | %           | 0.6     | %    | 0.6   |
| Linear Mold Shrinkage (Normal)  | D 955  | %           | 0.8     | %    | 0.8   |
| <b>Mechanical Properties</b>  |        |             |         |      |       |
| Hardness, Rockwell (R Scale)  | D 785  | -           | 122     | -    | 122   |
| Tensile Strength  | D 638  | psi         | 17,400  | MPa  | 120   |
| Ultimate Elongation   | D 638  | %           | 4       | %    | 4     |
| Flexural Modulus  | D 790  | psi         | 870,000 | MPa  | 6,000 |
| Flexural Strength   | D 790  | psi         | 25,500  | MPa  | 176   |
| Notched Izod Impact   | D 256  | ft.lbs./in. | 1.2     | J/m  | 60    |
| <b>Thermal Properties</b>   |        |             |         |      |       |
| Melting Temperature   | D 789  | °F          | 500     | °C   | 260   |
| Heat Deflection Temp, 66 psi (0.45 MPa)   | D 648  | °F          | 480     | °C   | 249   |
| Heat Deflection Temp, 264 psi (1.82 MPa)  | D 648  | °F          | 450     | °C   | 232   |
| <small>All test specimens tested in "dry" state – less than 0.3% moisture.<br/>           Izod Impact – ½" x ¼" bars.<br/>           All tensile properties obtained at a testing speed of 2 in./min.</small>   |        |             |         |      |       |
| <small>The information contained herein is based upon data believed to be thoroughly reliable. However, due to the many uses to which this material is put, and the different equipment and techniques used, we cannot guarantee results in specific instances. Nor should any statement herein be construed as a recommendation to use our products in the infringement of a patent.</small> |        |             |         |      |       |