

## Technical Data Sheet

### *Alcryn* 2060NC INJ NAT



Melt Processable Rubber

#### Product Description

*Alcryn* 2060NC INJ NAT is a Melt Processable Rubber material and is typically used in Blow Molding, Extrusion, Injection Molding, Vacuum Forming applications. Features include: Fast Molding Cycle, High Flow, High Heat Resistance, Noise Damping, Oil Resistant, Ozone Resistant, Recyclable Material, and Vibration Damping.

|                          |                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Processing Method</b> | Blow Molding; Extrusion; Injection Molding; Vacuum Forming                                                                                                                            |
| <b>Attribute</b>         | Fast Molding Cycle; High Flow; High Heat Resistance; Noise Damping; Oil Resistant; Ozone Resistant; Recyclable Material; Vibration Damping                                            |
| <b>Forms</b>             | Pellets                                                                                                                                                                               |
| <b>Appearance</b>        | Natural Color                                                                                                                                                                         |
| <b>Application</b>       | Cable Jacketing; Coating Applications; Fabric Coatings; Flexible Grips; Gaskets; General Purpose; Handles; Hose; Overmolding; Profiles; Seals; Tubing; Weatherstripping; Wire & Cable |

| Typical Properties                               | Nominal Value | Units             | Test Method |
|--------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                  |               |                   |             |
| Density                                          | 1.12          | g/cm <sup>3</sup> | ISO 2781    |
| Density - Specific Gravity                       | 1.12          | g/cm <sup>3</sup> | ASTM D471   |
| Change in Volume                                 |               |                   |             |
| (in Reference Fuel B, 27 °C, 168 hr)             | 17            | %                 | ISO 1817    |
| (in Reference Fuel B, 27 °C, 168 hr)             | 17            | %                 | ASTM D471   |
| (in ASTM #1 Oil, 100 °C, 168 hr)                 | -21           | %                 | ISO 1817    |
| (in ASTM #1 Oil, 100 °C, 168 hr)                 | -21           | %                 | ASTM D471   |
| (in IRM 903 Oil, 100 °C, 168 hr)                 | 17            | %                 | ASTM D471   |
| (in IRM 903 Oil, 100 °C, 168 hr)                 | 17            | %                 | ISO 1817    |
| (in Water, 100 °C, 168 hr)                       | 8.0           | %                 | ISO 1817    |
| (in Water, 100 °C, 168 hr)                       | 8.0           | %                 | ASTM D471   |
| Melt Viscosity, (190 °C, 300 sec <sup>-1</sup> ) | 350           | Pa·s              | ASTM D3835  |
| <b>Mechanical</b>                                |               |                   |             |
| Tensile Stress at 100%                           |               |                   |             |
| (1.90 mm)                                        | 3.00          | MPa               | ISO 37      |
| (1.90 mm)                                        | 3.00          | MPa               | ASTM D412   |
| (125 °C, 1.90 mm)                                | 2.70          | MPa               | ASTM D573   |
| (125 °C, 1.90 mm)                                | 2.70          | MPa               | ISO 188     |

|                                                                |               |       |            |
|----------------------------------------------------------------|---------------|-------|------------|
| Torsion Modulus                                                |               |       |            |
| (24 °C, 1.9 mm)                                                | 2.3           | MPa   | ASTM D1043 |
| Compression Molded                                             |               |       |            |
| (-20 °C, 1.9 mm)                                               | 4.8           | MPa   | ASTM D1043 |
| Compression Molded                                             |               |       |            |
| Tensile Set                                                    | 8             | %     | ASTM D412  |
| Clash-Berg Modulus, (-42 °C)                                   | 68.9          | MPa   | ASTM D1043 |
| Tensile Strength at Yield                                      |               |       |            |
| (1.90 mm)                                                      | 7.90          | MPa   | ASTM D412  |
| (125 °C, 1.90 mm)                                              | 6.50          | MPa   | ASTM D573  |
| Tensile Stress at Yield                                        |               |       |            |
| (1.90 mm)                                                      | 7.90          | MPa   | ISO 37     |
| (125 °C, 1.90 mm)                                              | 6.50          | MPa   | ISO 188    |
| Tensile Strain at Break                                        |               |       |            |
| (1.90 mm)                                                      | 420           | %     | ISO 37     |
| (125 °C, 1.90 mm)                                              | 340           | %     | ISO 188    |
| Tensile Elongation at Break                                    |               |       |            |
| (125 °C, 1.90 mm)                                              | 340           | %     | ASTM D573  |
| (1.90 mm)                                                      | 420           | %     | ASTM D412  |
| Tear Strength, (Die C, 1.90 mm)                                | 28.0          | kN/m  | ASTM D624  |
| Impact                                                         |               |       |            |
| Ductile/Brittle Transition Temperature                         | -85           | °C    | ASTM D746  |
| Hardness                                                       |               |       |            |
| Change in Shore Hardness in Air, (Shore A, 125 °C, 168 hr)     | 1.0           |       | ISO 188    |
| Shore Hardness, (Shore A, 1.90 mm, Compression Molded)         | 59            |       | ISO 868    |
| Change in Durometer Hardness in Air, (Shore A, 125 °C, 168 hr) | 1.0           |       | ASTM D573  |
| Durometer Hardness, (Shore A, 1.90 mm, Compression Molded)     | 59            |       | ASTM D2240 |
| Additional Information                                         |               |       |            |
| Compression Set                                                |               |       |            |
| (24 °C, 22 hr, Method B)                                       | 13            | %     | ASTM D395  |
| (100 °C, 22 hr, Method B)                                      | 62            | %     | ASTM D395  |
| (24 °C, 22 hr)                                                 | 13            | %     | ISO 815    |
| (100 °C, 22 hr)                                                | 62            | %     | ISO 815    |
| Taber Abrasion Resistance, (CS-17 Wheel, 1000 g, 1000 Cycles)  | 5.00          | mg    | ASTM D1044 |
| UL Information                                                 |               |       |            |
| UL File Number, (USA)                                          | E51193        |       |            |
| Injection Parameters                                           |               |       |            |
|                                                                | Nominal Value | Units |            |
| Processing (Melt) Temp                                         | 177           | °C    |            |