

## Technical Data Sheet

**Centrex ASA 810 90195 UVWHI**

Acrylonitrile Styrene Acrylate

**Product Description**

Centrex ASA 810 90195 UVWHI is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Processability, Good Weather Resistance, High Flow, High Gloss, and Medium Impact Resistance.

|                          |                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------|
| <b>Processing Method</b> | Injection Molding                                                                             |
| <b>Attribute</b>         | Good Processability; Good Weather Resistance; High Flow; High Gloss; Medium Impact Resistance |
| <b>Forms</b>             | Pellets                                                                                       |
| <b>Application</b>       | Outdoor Applications                                                                          |

| Typical Properties                                     | Nominal Value | Units             | Test Method |
|--------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                        |               |                   |             |
| Melt Flow Rate, (220 °C/10.0 kg)                       | 21            | g/10 min          | ASTM D1238  |
| Density - Specific Gravity                             | 1.06          | g/cm <sup>3</sup> | ASTM D792   |
| <b>Mechanical</b>                                      |               |                   |             |
| Tensile Strength at Yield, (5.1 mm/min)                | 40.7          | MPa               | ASTM D638   |
| Flexural Modulus, (1.3 mm/min, Tangent)                | 2390          | MPa               | ASTM D790   |
| Tensile Modulus, (5.1 mm/min)                          | 2460          | MPa               | ASTM D638   |
| Flexural Strength, (1.3 mm/min)                        | 70.3          | MPa               | ASTM D790   |
| <b>Impact</b>                                          |               |                   |             |
| Instrumented Dart Impact                               |               |                   |             |
| (23 °C, Total Energy)                                  | 45.0          | J                 | ASTM D3763  |
| (-30 °C, Total Energy)                                 | 10.0          | J                 | ASTM D3763  |
| (0 °C, Total Energy)                                   | 40.0          | J                 | ASTM D3763  |
| Notched Izod Impact                                    |               |                   |             |
| (23 °C, 3.18 mm)                                       | 85            | J/m               | ASTM D256   |
| (-30 °C, 3.18 mm)                                      | 53            | J/m               | ASTM D256   |
| (0 °C, 3.18 mm)                                        | 64            | J/m               | ASTM D256   |
| <b>Hardness</b>                                        |               |                   |             |
| Rockwell Hardness, (R-Scale)                           | 100           |                   | ASTM D785   |
| <b>Thermal</b>                                         |               |                   |             |
| Deflection Temperature Under Load Unannealed (264 psi) |               |                   |             |
| (3.18 mm)                                              | 74.0          | °C                | ASTM D648   |
| (6.35 mm)                                              | 80.0          | °C                | ASTM D648   |

| Injection Parameters                  | Nominal Value | Units |
|---------------------------------------|---------------|-------|
| Drying Time, (Desiccant Dryer)        | 2.0           | hr    |
| Drying Temperature, (Desiccant Dryer) | 82 to 88      | °C    |
| Dew Point, (Desiccant Dryer)          | -29           | °C    |
| Suggested Max Moisture                | 0.1           | %     |
| Nozzle Temperature                    | 238 to 271    | °C    |
| Processing (Melt) Temp                | 238 to 271    | °C    |
| Front Temperature                     | 238 to 271    | °C    |
| Screw L/D Ratio                       | 20.0-1.0      |       |
| Screw Compression Ratio               | 2.5-1.0       |       |
| Suggested Shot Size                   | 50 to 70      | %     |
| Middle Temperature                    | 238 to 271    | °C    |
| Rear Temperature                      | 238 to 271    | °C    |
| Injection Rate                        | Moderate      |       |
| Mold Temperature                      | 43 to 82      | °C    |