## **MATERIALS DATA SHEET**

787 Renaissance Parkway | Painesville, OH 44077



## **Material Series: AS8130**

## **SERIES DESCRIPTION & APPLICATION**

AS8130 is a SMC Product developed for electrical product applications. This product is in process of UL approval UL-94 V-0 @ 1.5 mm/UL-94 5VA @ 3.0mm. This series provides excellent electrical properties while also providing best in class strength.

| General Material Properties  |              |       |  |  |  |
|------------------------------|--------------|-------|--|--|--|
| Property (Test Method)       | Value        | Units |  |  |  |
| Specific Gravity (ASTM D792) | 1.70-1.80    |       |  |  |  |
| Mold Shrinkage (ASTM D955)   | 0.0015-0.003 | in/in |  |  |  |
| Glass Content                | 30           | %     |  |  |  |

| Mechanical Material Properties (Cut) |                            |                |                |  |  |
|--------------------------------------|----------------------------|----------------|----------------|--|--|
| Property (Test Method)               | Value (US)                 | Value (Metric) | Units          |  |  |
| Tensile Strength (ASTM D638)         | 9,000-12,000               | 60-80          | psi (MPa)      |  |  |
| Tensile Modulus (ASTM D638)          | 1.6-1.75 x 10 <sup>6</sup> | 11.0-12.0      | psi (GPa)      |  |  |
| Flexural Strength (ASTM D790)        | 22,000-30,000              | 150-205        | psi (MPa)      |  |  |
| Flexural Modulus (ASTM D790)         | 1.6-1.9 x 10 <sup>6</sup>  | 11.0-13.1      | psi (GPa)      |  |  |
| Notched Izod Impact (ASTM D256)      | 13-17                      | 700-905        | ft-lb/in (J/m) |  |  |

| Mechanical Material Properties (Molded) |                            |                |                |  |  |
|-----------------------------------------|----------------------------|----------------|----------------|--|--|
| Property (Test Method)                  | Value (US)                 | Value (Metric) | Units          |  |  |
| Tensile Strength (ASTM D638)            | 18,000-22,000              | 125-150        | psi (MPa)      |  |  |
| Tensile Modulus (ASTM D638)             | 1.85-2.1 x 10 <sup>6</sup> | 12.7-14.4      | psi (GPa)      |  |  |
| Flexural Strength (ASTM D790)           | 33,000-36,000              | 230-250        | psi (MPa)      |  |  |
| Flexural Modulus (ASTM D790)            | 2.0-2.2 x 10 <sup>6</sup>  | 13.8-15.1      | psi (GPa)      |  |  |
| Notched Izod Impact (ASTM D256)         | 14-16                      | 750-850        | ft-lb/in (J/m) |  |  |

All property values are based on test performed on standard ASTM test samples and according to standard ASTM test methods unless otherwise indicated. This information is offered solely for your consideration and is to be used as a guide only. No other warranty is implied.

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| Thermal and Electrical Material Properties  |               |                |                   |  |  |
|---------------------------------------------|---------------|----------------|-------------------|--|--|
| Property (Test Method)                      | Value (US)    | Value (Metric) | Units             |  |  |
| Flammability (UL 94 V0) *In process         | Pass 0.06     | Pass 1.5       | in (mm)           |  |  |
| Flammability (UL 94 5VA) *In process        | Pass 0.12     | Pass 3.0       | in (mm)           |  |  |
| Heat Deflection Temperature (ASTM D648)     | TBD           | TBD            | °F (°C)           |  |  |
| UL RTI Elec, Imp, Str (UL 746B) *In Process | 266, 266, 266 | 130, 130, 130  | °F (°C)           |  |  |
| Dielectric Strength (ASTM D149)             | 360-380       | 14.1-15.0      | Volts/mil (kV/mm) |  |  |
| Arc Track Resistance (ASTM D495)            | 185+          | 185+           | Seconds           |  |  |

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**Contact Us:** 

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