

# CYCOLAC™ RESIN INP563

REGION AMERICAS

## DESCRIPTION

Medium flow powder SAN for color concentrates and alloys.

## TYPICAL PROPERTY VALUES

Revision 20170816

| PROPERTIES                                   | TYPICAL VALUES | UNITS             | TEST METHODS |
|----------------------------------------------|----------------|-------------------|--------------|
| MECHANICAL                                   |                |                   |              |
| Tensile Stress, yld, Type I, 5 mm/min        | 69             | MPa               | ASTM D 638   |
| Tensile Stress, brk, Type I, 5 mm/min        | 69             | MPa               | ASTM D 638   |
| Tensile Strain, yld, Type I, 5 mm/min        | 2.4            | %                 | ASTM D 638   |
| Tensile Strain, brk, Type I, 5 mm/min        | 2.4            | %                 | ASTM D 638   |
| Tensile Modulus, 5 mm/min                    | 3860           | MPa               | ASTM D 638   |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 93             | MPa               | ASTM D 790   |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 3770           | MPa               | ASTM D 790   |
| Hardness, Rockwell R                         | 123            | -                 | ASTM D 785   |
| Tensile Stress, yield, 50 mm/min             | 74             | MPa               | ISO 527      |
| Tensile Stress, break, 50 mm/min             | 74             | MPa               | ISO 527      |
| Tensile Strain, yield, 50 mm/min             | 2              | %                 | ISO 527      |
| Tensile Strain, break, 50 mm/min             | 2              | %                 | ISO 527      |
| Tensile Modulus, 1 mm/min                    | 3970           | MPa               | ISO 527      |
| Flexural Stress, yield, 2 mm/min             | 46             | MPa               | ISO 178      |
| Flexural Modulus, 2 mm/min                   | 3460           | MPa               | ISO 178      |
| IMPACT                                       |                |                   |              |
| Izod Impact, notched, 23°C                   | 18             | J/m               | ASTM D 256   |
| Izod Impact, notched, -30°C                  | 22             | J/m               | ASTM D 256   |
| Izod Impact, notched 80*10*4 +23°C           | 2              | kJ/m <sup>2</sup> | ISO 180/1A   |
| Izod Impact, notched 80*10*4 -30°C           | 2              | kJ/m <sup>2</sup> | ISO 180/1A   |
| Charpy Impact, notched, 23°C                 | 1              | kJ/m <sup>2</sup> | ISO 179/2C   |
| THERMAL                                      |                |                   |              |
| HDT, 0.45 MPa, 3.2 mm                        | 95             | °C                | ASTM D 648   |
| HDT, 1.82 MPa, 3.2mm, unannealed             | 82             | °C                | ASTM D 648   |
| Vicat Softening Temp, Rate B/50              | 102            | °C                | ISO 306      |
| Vicat Softening Temp, Rate B/120             | 104            | °C                | ISO 306      |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm        | 85             | °C                | ISO 75/Af    |





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|-------------------------------|----------------|-------------------|--------------|
| PHYSICAL                      |                |                   |              |
| Specific Gravity              | 1.08           | -                 | ASTM D 792   |
| Melt Flow Rate, 230°C/3.8 kgf | 19.5           | g/10 min          | ASTM D 1238  |
| Density                       | 1.08           | g/cm <sup>3</sup> | ISO 1183     |
| Melt Flow Rate, 220°C/10.0 kg | 47             | g/10 min          | ISO 1133     |

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