



# CYCOLACT™ RESIN INP563

REGION AMERICAS

## DESCRIPTION

Medium flow powder SAN for color concentrates and alloys. FDA compliant (part use must be at room temperature or below).

## TYPICAL PROPERTY VALUES

| PROPERTIES                                   | TYPICAL VALUES | UNITS    | TEST METHODS |
|----------------------------------------------|----------------|----------|--------------|
| <b>MECHANICAL</b>                            |                |          |              |
| Tensile Stress, yld, Type I, 5 mm/min        | 69             | MPa      | ASTM D638    |
| Tensile Stress, brk, Type I, 5 mm/min        | 69             | MPa      | ASTM D638    |
| Tensile Strain, yld, Type I, 5 mm/min        | 2.4            | %        | ASTM D638    |
| Tensile Strain, brk, Type I, 5 mm/min        | 2.4            | %        | ASTM D638    |
| Tensile Modulus, 5 mm/min                    | 3860           | MPa      | ASTM D638    |
| Flexural Stress, yld, 1.3 mm/min, 50 mm span | 93             | MPa      | ASTM D790    |
| Flexural Modulus, 1.3 mm/min, 50 mm span     | 3770           | MPa      | ASTM D790    |
| Hardness, Rockwell R                         | 123            | -        | ASTM D785    |
| 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      |
| <b>IMPACT</b>                                |                |          |              |
| Izod Impact, notched, 23°C                   | 18             | J/m      | ASTM D256    |
| Izod Impact, notched, -30°C                  | 22             | J/m      | ASTM D256    |
| Izod Impact, notched 80*10*4 +23°C           | 2              | kJ/m²    | ISO 180/1A   |
| Izod Impact, notched 80*10*4 -30°C           | 2              | kJ/m²    | ISO 180/1A   |
| Charpy Impact, notched, 23°C                 | 1              | kJ/m²    | ISO 179/2C   |
| <b>THERMAL</b>                               |                |          |              |
| HDT, 0.45 MPa, 3.2 mm                        | 95             | °C       | ASTM D648    |
| HDT, 1.82 MPa, 3.2mm, unannealed             | 82             | °C       | ASTM D648    |
| 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    |
| <b>PHYSICAL</b>                              |                |          |              |
| Specific Gravity                             | 1.08           | -        | ASTM D792    |
| Melt Flow Rate, 230°C/3.8 kg                 | 19.5           | g/10 min | ASTM D1238   |
| Density                                      | 1.08           | g/cm³    | ISO 1183     |
| Melt Flow Rate, 220°C/10.0 kg                | 47             | g/10 min | ISO 1133     |
| <b>OPTICAL</b>                               |                |          |              |
| Light Transmission, 2.54 mm                  | 92             | %        | ASTM D1003   |
| Haze, 2.54 mm                                | 1.5            | %        | ASTM D1003   |