

## ColorRx® NY4-1000RX

Americhem - Polyamide 11

### General Information

#### Product Description

NY4-1000RX is a biobased injection molding grade of nylon 11 with low moisture absorption and good chemical resistance. It is suitable for healthcare applications.

#### General

|                   |                                                  |                                                             |                 |
|-------------------|--------------------------------------------------|-------------------------------------------------------------|-----------------|
| Material Status   | • Commercial: Active                             |                                                             |                 |
| Availability      | • Africa & Middle East<br>• Asia Pacific         | • Europe<br>• Latin America                                 | • North America |
| Features          | • Biocompatible<br>• Ethylene Oxide Sterilizable | • Excellent Colorability<br>• Radiation Sterilizable        |                 |
| Uses              | • Closures<br>• Engineering Parts                | • Medical/Healthcare Applications<br>• Surgical Instruments |                 |
| Forms             | • Pellets                                        |                                                             |                 |
| Processing Method | • Injection Molding                              |                                                             |                 |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value  | Unit     | Test Method |
|---------------------------------------------------------|----------------|----------|-------------|
| Density / Specific Gravity                              | 1.03           |          | ASTM D792   |
| Molding Shrinkage - Flow (0.125 in)                     | 0.014 to 0.018 | in/in    | ASTM D955   |
| Water Absorption (24 hr)                                | 0.40           | %        | ASTM D570   |
| Mechanical                                              | Nominal Value  | Unit     | Test Method |
| Tensile Strength <sup>2</sup> (Yield)                   | 5800           | psi      | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Yield)                 | 5.0            | %        | ASTM D638   |
| Tensile Elongation (Break)                              | > 200          | %        | ASTM D638   |
| Flexural Modulus <sup>2</sup>                           | 165000         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value  | Unit     | Test Method |
| Notched Izod Impact (73°F)                              | 1.8            | ft-lb/in | ASTM D256   |
| Hardness                                                | Nominal Value  | Unit     | Test Method |
| Rockwell Hardness (R-Scale)                             | 108            |          | ASTM D785   |
| Thermal                                                 | Nominal Value  | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 130            | °F       | ASTM D648   |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min

