# CONTINUUM™ DGDC-2482 NT
## Bimodal Polyethylene Resin

**Overview**

CONTINUUM™ DGDC-2482 NT Bimodal Polyethylene Resin is produced using UNIPOL™ II process technology. This product may be utilized for pipe applications where long-term hydrostatic strength combined with outstanding resistance to slow crack growth and rapid crack propagation are desired. Suitable applications include natural gas distribution pipes, large diameter industrial piping, mining, sewage, and municipal water service lines.

Industrial Standards Compliance:

ASTM D 3350: cell classification

- Natural - PE445574A CC0
- Black - PE445574C CC0 (See NOTES A)

Plastics Pipe Institute (PPI): TR-4

- Black Pipe - CONTINUUM DGDC-2482 BK (See NOTES A)
  - ASTM PE4710 pipe grade - 1600psi HDB @ 73°F and 1000psi HDB @ 140°F

NSF International: Standard 14 and 61

- Black Pipe - DGDC-2482 BK (See NOTES A)

Consult the regulations for complete details.

NOTES:

(A) Natural resin extruded under proper conditions with carbon black masterbatch DFNF-0092 (6.5%).

**Additive**

- Antiblock: No
- Slip: No
- Processing Aid: Yes

| Physical | Nominal Value | (English) | Nominal Value | (SI) | Test Method |
|---|---|---|---|---|---|
| Density | | | | | ASTM D792 |
| Natural | 0.949 | g/cm³ | 0.949 | g/cm³ | |
| Black [1] | 0.959 | g/cm³ | 0.959 | g/cm³ | |
| Melt Index | | | | | ASTM D1238 |
| 190°C/2.16 kg | 0.080 | g/10 min | 0.080 | g/10 min | |
| 190°C/21.6 kg | 6.8 | g/10 min | 6.8 | g/10 min | |
| **Mechanical** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Tensile Strength [2] (Yield) | > 3500 | psi | > 24.1 | MPa | ASTM D638 |
| Tensile Elongation [2] (Break) | > 500 | % | > 500 | % | ASTM D638 |
| Flexural Modulus [3, 2] | 150000 | psi | 1030 | MPa | ASTM D790B |
| Hydrostatic Strength [1] | | | | | ASTM D1598 |
| 1798 psi (12.4 MPa) : 68°F (20°C) | > 100 | hr | > 100 | hr | |
| 798 psi (5.5 MPa) : 176°F (80°C) | > 1000 | hr | > 1000 | hr | |
| Resistance to Rapid Crack Propagation, Pc [4] | > 174 | psi | > 12.0 | bar | ISO 13477 |
| Resistance to Rapid Crack Propagation, Tc [4] | < 2 | °F | < -17 | °C | ISO 13477 |
| Slow Crack Growth PENT [2] | 5000 | hr | 5000 | hr | ASTM F1473 |
| **Impact** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Notched Izod Impact [2] (73°F (23°C)) | 9.1 | ft·lb/in | 490 | J/m | ASTM D256A |
| **Thermal** | **Nominal Value** | **(English)** | **Nominal Value** | **(SI)** | **Test Method** |
| Brittleness Temperature [2] | < -103 | °F | < -75.0 | °C | ASTM D746A |
| Thermal Stability | > 428 | °F | > 220 | °C | ASTM D3350 |

**Notes**

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] Natural resin extruded under proper conditions with carbon black masterbatch DFNF-0092 BK (6.5%)

[2] Compression molded parts prepared according to ASTM D 4703 Procedure C unless otherwise noted in the test method. Properties will vary with changes in molding conditions and aging time.

[3] Method I (3 point load)

[4] 3Natural resin extruded under proper conditions with carbon black masterbatch DFNF-0092 BK (6.5%)
Pipe diameter of 10 inch IPS (25.4 cm) and Standard Diameter Ratio (SDR) 11.