

# EnLene 1001

HDPE



| Product Description  |   |               |          |                               |         |
|--|---|---------------|----------|-------------------------------|---------|
| EnLene 1001 is a homopolymer with outstanding stiffness with a good balance of processability and<br>Cold Temperature impact<br>High stiffness<br>Maximum impact strength and toughness<br>FDA 21 CFR 177.1520 |   |               |          |                               |         |
| General Properties   |   |               |          |                               |         |
| Appearance   | Natural                                   |               |          |                               |         |
| Processing Methods   | Injection Molding                         |               |          |                               |         |
| Applications   | Crates / Cases / Hot Fill Packaging Pails |               |          |                               |         |
| Mechanical Properties  | Test Method                               | English Units |          | S.I. Units                    |         |
| Tensile Strength @ Yield   | ASTM D638                                 | 4,800         | psi      | 33                            | MPa     |
| Flexural Modulus   | ASTM D790                                 | 250,000       | psi      | 1,724                         | MPa     |
| Notched Izod Impact (73°F)   | ASTM D256                                 | 1.0           | ft-lb/in | 53                            | J/m     |
| Physical Properties  | Test Method                               | English Units |          | S.I. Units                    |         |
| Specific Gravity   | ASTM D792                                 | 0.96          | sp gr    | 0.96                          | sp gr   |
| Melt Flow 190 C/5.0 kg   | ASTM D1238                                | 10.0          | g/10min  | 10.0                          | g/10min |
| Mold Shrink - Flow: 0.126 in (3.20 mm)   | ASTM D955                                 | 0.018 - 0.022 | in/in    | 0.018 - 0.022                 | %       |
| Thermal Properties   | Test Method                               | English Units |          | S.I. Units                    |         |
| Heat Deflection Temperature @ 66 psi   | ASTM D648                                 | 188           | °F       | 87                            | °C      |
| Injection Molding  |   | Value         |          |                               |         |
| Suggested Shot Size  | 25-75                                     | %">           |          |                               |         |
| Rear Barrel Temperatures   | 450                                       | °F">          |          |                               |         |
| Middle Barrel Temperatures   | 470                                       | °F">          |          |                               |         |
| Front Barrel Temperatures  | 475                                       | °F">          |          |                               |         |
| Nozzle Temperature   | 475                                       | °F">          |          |                               |         |
| Melt (processing) Temperatures   | 485                                       | °F">          |          |                               |         |
| Mold Temperatures  | 45-65                                     | °F">          |          | May be increased to help flow |         |
| Back Pressure  | 25-50                                     | psi">         |          |                               |         |
| Screw speed  | 25-75                                     | rpm">         |          |                               |         |
| Vent Depth   | 0.0010 - 0.0015                           | in">          |          |                               |         |

# EnLene 1001

HDPE



These Data Sheet Values are Typical Values and are not intended for specification purposes. These values should only be used as a guide and no assurances by EnCom, Inc. can be granted that all molded articles will exhibit duplicate properties as those listed above. Each material user should perform their own testing for suitability.

---

EnCom Polymers, Inc.

812-421-7700 • [www.encompolymers.com](http://www.encompolymers.com)