# Resilience™ LS21000E

Rigid Polyvinyl Chloride

PolyOne Corporation

## Message:

Resilience™LS21000E is a rigid polyvinyl chloride product. It is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.
Typical application areas are: lighting equipment.
Features include:
flame retardant/rated flame
Good UV resistance
Impact resistance
good weather resistance

| General Information | | | |
|---|---|---|---|
| UL YellowCard | E41877-102513183 | | |
| Features | Impact resistance, good<br>Good UV resistance<br>Good weather resistance | | |
| Uses | Lighting Applications | | |
| Forms | Cube | | |
| **Physical** | **Nominal Value** | **Unit** | **Test Method** |
| Specific Gravity | 1.45 | g/cm³ | ASTM D792 |
| PVC Cell Classification | 13254 | | ASTM D1784 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Durometer Hardness (Shore D, 15 sec) | 77 | | ASTM D2240 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus [1] | 2820 | MPa | ASTM D638 |
| Tensile Strength [2] (Yield) | 44.8 | MPa | ASTM D638 |
| Flexural Modulus | 3150 | MPa | ASTM D790 |
| Flexural Strength | 80.4 | MPa | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact [3] (23°C, 3.18 mm, Compression Molded) | 190 | J/m | ASTM D256A |
| Drop Impact Resistance | | | ASTM D4226 |
| 23°C [4] | 89.4 | J/cm | ASTM D4226 |
| 23°C [5] | > 138 | J/cm | ASTM D4226 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load | | | ASTM D648 |
| 0.45 MPa, annealed, 3.18mm [6] | 77.5 | °C | ASTM D648 |
| 0.45 MPa, annealed, 3.18mm [7] | 75.6 | °C | ASTM D648 |
| 1.8 MPa, annealed, 3.18mm, molded [8] | 72.7 | °C | ASTM D648 |
| 1.8 MPa, annealed, 3.18mm, molded [9] | 75.3 | °C | ASTM D648 |

| | | | |
|---|---|---|---|
| CLTE - Flow | 6.5E-5 | cm/cm/°C | ASTM D696 |
| Flammability | Nominal Value | | Test Method |
| Flame Rating (0.9 mm, ALL) | V-0 | | UL 94 |
| Additional Information | Nominal Value | | |
| Ease of Sizing | Excellent | | |
| Physical property tests based on white 1185 lot#15141264 box 1 | | | |
| Extrusion | Nominal Value | Unit | |
| Melt Temperature | 182 - 193 | °C | |
| NOTE | | | |
| 1. | Type 1, 5.1 mm/min | | |
| 2. | Type 1, 5.1 mm/min | | |
| 3. | Test specimens prepared from compression molded milled sheet. | | |
| 4. | Procedure A, C.125 Throwing | | |
| 5. | Procedure B, C.125 Throwing | | |
| 6. | Test specimens annealed at 60 deg.C | | |
| 7. | Test specimens annealed at 50 deg.C | | |
| 8. | Test specimens annealed at 50 deg.C | | |
| 9. | Test specimens annealed at 60 deg.C | | |



## Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

WECHAT