

# Westlake PVC LR-5009

Westlake Chemical Corporation - Rigid Polyvinyl Chloride

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## General Information

### Product Description

LR-5009 is an economical, high-flow rigid injection molding PVC compound for interior fittings. This compound is designed for multi-cavity molds and large diameter fittings. This compound is characterized by excellent process ability, which includes color hold, regrind stability, and surface appearance. LR-5009 is listed under NSF Standard 14 and Standard 61 for both potable water and DWV applications.

### General

|                   |   |                                      |                 |
|-------------------|---|--------------------------------------|-----------------|
| Material Status   | • Commercial: Active                            |                                      |                 |
| Availability      | • North America                                 |                                      |                 |
| Features          | • Good Color Stability<br>• Good Processability | • Good Surface Finish<br>• High Flow | • High Rigidity |
| Uses              | • Fittings                                      | • Potable Water Applications         |                 |
| Agency Ratings    | • ASTM D1784                                    | • NSF STD-14                         | • NSF STD-61    |
| Processing Method | • Injection Molding                             |                                      |                 |

## ASTM & ISO Properties<sup>1</sup>

| Physical  | Nominal Value | Unit              | Test Method     |
|---|---------------|-------------------|-----------------|
| Density / Specific Gravity                                | 1.37 to 1.41  | g/cm <sup>3</sup> | ASTM D792       |
| Molding Shrinkage - Flow                                  | 0.20 to 0.30  | %                 | ASTM D955       |
| PVC Cell Classification                                   | 12454         |                   | ASTM D1784      |
| Flow Ratio <sup>2</sup> (199 to 204°C)                    | 170           |                   | Internal Method |
| Mechanical  | Nominal Value | Unit              | Test Method     |
| Tensile Modulus   | 2960          | MPa               | ASTM D638       |
| Tensile Strength (Yield)                                  | 50.5          | MPa               | ASTM D638       |
| Flexural Modulus  | 2980          | MPa               | ASTM D790       |
| Flexural Strength   | 88.3          | MPa               | ASTM D790       |
| Impact  | Nominal Value | Unit              | Test Method     |
| Notched Izod Impact (23°C, 3.18 mm)                       | 59            | J/m               | ASTM D256       |
| Drop Impact Resistance <sup>3</sup> (23°C)                | 26.7          | J/cm              | ASTM D4226      |
| Hardness  | Nominal Value | Unit              | Test Method     |
| Rockwell Hardness (R-Scale)                               | 117           |                   | ASTM D785       |
| Thermal   | Nominal Value | Unit              | Test Method     |
| Deflection Temperature Under Load<br>0.45 MPa, Unannealed | 76.0          | °C                | ASTM D648       |
| Deflection Temperature Under Load<br>1.8 MPa, Unannealed  | 72.0          | °C                | ASTM D648       |
| Flammability  | Nominal Value | Unit              | Test Method     |
| Oxygen Index  | 38            | %                 | ASTM D2863      |

### Notes

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

<sup>2</sup> Distance/Wall Thickness

<sup>3</sup> Procedure A, C 1/2" R Tup

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