



# POLYVINYL CHLORIDE

## 1091

**Producer:** Georgia Gulf / The United States (USA)

**Characteristic:** **PVC - 1091** is a medium molecular weight, general purpose, vinyl suspension resin designed for pipe, siding, window lineals and other general rigid extrusion applications where consistent particle size distribution, and low contamination and residual VCM levels are important. This resin has good color and thermal stability.

**PVC - 1091** is listed in PPI's Technical Report, "Policies and Procedures for Developing Recommended Hydrostatic Design Stresses for Thermoplastic Pipe Materials" (TR-3/92), under part Y, "PVC Range Composition Exempted from Stress-Rupture Data Requirements for Listing at 73 0F (23.0 °C)" as GG 1091. **PVC-1091** also meets the requirements under part S, "Substitution of Resin In Polyvinyl Chloride (PVC) Plastic Pipe Formulations".

| PROPERTIES                              | METHODS      | VALUES   |
|---|--------------|--|
| ASTM Cell Classification                | ASTM D 1755  | GP3-16440                                      |
| Inherent Viscosity                      | ASTM D 1243  | 0.90 ± 0.02                                    |
| Relative Viscosity                      |              | 2.13   |
| K' value                                | DIN 53726    | 65   |
| Bulk Density, lbs/ft <sup>3</sup>       | ASTM D 1895  | 33.0 min.                                      |
| gms/cm <sup>3</sup>                     |              | 0.529 min.                                     |
| Percent Volatiles                       | GGC 02-05-00 | 0.35 max.                                      |
| Residual Vinyl Chloride monomer, ppm    | ASTM D 3749  | 2.0 max.                                       |
| Hunterlab color, 'L'                    | GGC 02-25-00 | 95.5 min.                                      |
| "a'                                     |              | 0.20 max.                                      |
| 'b'                                     |              | 1.75 max.                                      |
| Slurry Contamination, particles/100 gms | GGC 02-21-00 | 20 max. (siding grade)<br>10 max. (pipe grade) |
| Particle Size Distribution              | ASTM D 1921  |  |
| percent retained on 40 mesh             | method A     | 0 max.   |
| 60 mesh                                 |              | 9 max.   |
| 200 mesh                                |              | 13. max.                                       |
| Pan                                     |              | 5 max.   |