

Apparent Modulus,

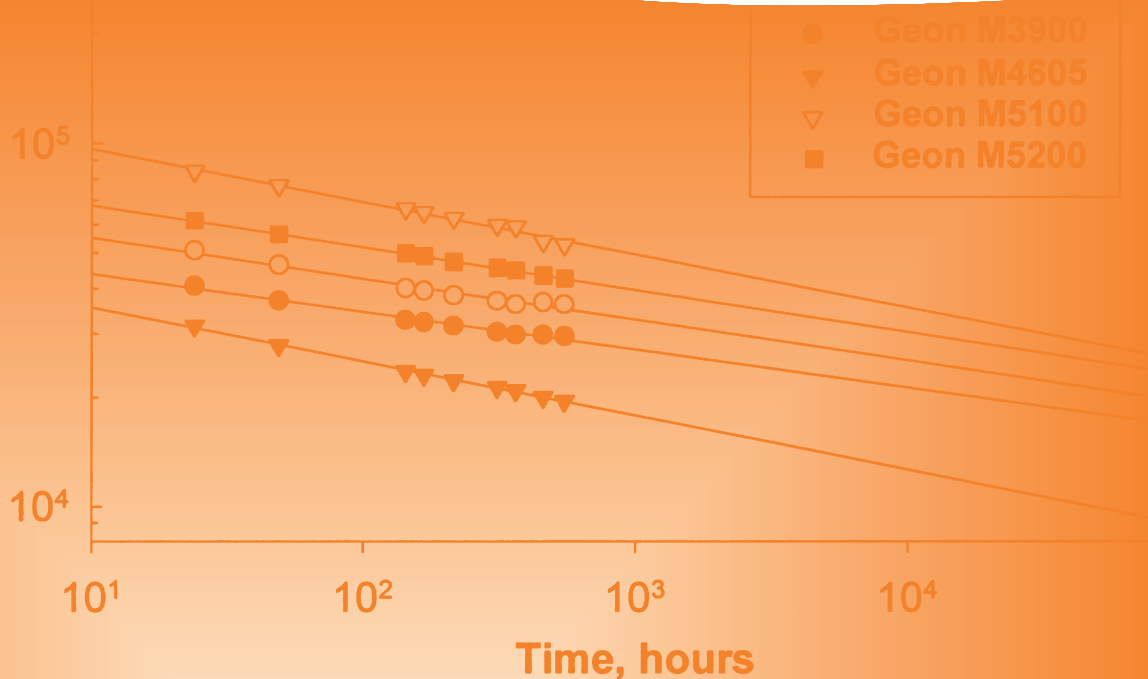


TABLE 1 – FORMULAE

Design	
	$y = 0.67 \left(\frac{EI^2}{h} \right)$
	$y = 1.09 \left(\frac{EI^2}{h} \right)$
	$y = 0.86 \left(\frac{EI^2}{h} \right)$

Part Design Engineering Guide

For Geon® Vinyl Rigid Molding Compounds

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PolyOne® Corporation

PolyOne Corporation is an international polymer services company with customer-focused operations in thermoplastic and elastomer compounds, specialty vinyl resins, specialty polymer formulations and inks, engineered films, color and additive systems, rubber

compounding, and thermoplastic resin distribution. Headquartered in Cleveland, Ohio, PolyOne has manufacturing sites in North America, Europe, Asia, and Australia, and joint ventures in North America, South America, Europe, Asia, and Australia.

Introduction

PolyOne's line of Geon® Vinyl Rigid Molding Compounds offers an outstanding blend of physical properties and excellent processability.

PolyOne, the world's largest polymer services company and leader in vinyl compounding, has combined low molecular weight vinyl resins with sophisticated state-of-the-art formulation technology to yield a unique family of rigid vinyl molding compounds. Geon® Vinyl Rigid Molding Compounds represent the latest in high performance.

More and more design engineers are choosing Geon® Vinyl Rigid Molding Compounds to make plastic parts, using proper design to achieve satisfactory structural properties because of:

- A broad range of compounds are now available
- Excellent flame retardance
- Chemical resistance
- See-through transparency
- Cost/performance balance is excellent
- Excellent toughness
- Custom compounding for specific needs is available

- Extensive engineering design data is available
- High modulus compared to other thermoplastics
- Glass-fiber reinforcement
- A range of heat distortion temperatures (HDTs) is available
- Excellent ranges of mold flow are available
- Custom colors are available
- Excellent electrical insulation
- Antistatic properties available
- Excellent weatherability

Vinyl is environmentally sound. Vinyl is often unjustifiably attacked by extremist environmental groups because it contains chlorine, a chloride from salt. However,

- Vinyl is environmentally sound.
- Vinyl is nontoxic.
- Vinyl uses less energy than most plastics.
- Vinyl is not a carcinogen.
- Vinyl contains no measurable dioxins.
- Vinyl is flame-retardant.

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That is our mission at PolyOne, and we fulfill it by delivering premium-quality products and services, which our customers use to enhance their own products. We believe no competitor can match our technical expertise because no workforce can outperform the people of PolyOne. Our people are ONE team working together – our strength and our pride. Their skills, passion, and dedication are shaping a potent industry leader, a concerned corporate citizen, and a great place to work.