

# Product Datasheet

# rmc3<sup>®</sup>

## Polymer Fusion Shaping Technology

### Description

Rotational Molding Compound (RMC3<sup>®</sup>) is a specialty polymer fusion shaping technology suitable for use in rotational molding where solid, structural reinforcement and integrity of critical features is required. Once applied into a rotational mold, RMC3<sup>®</sup> remains stable and cures solid during the molding process simulating compression molding in those areas. Finished parts exhibit solid features crucial to the form, fit, and function of rotationally molded products.

\*RMC3 can be easily shaped to your mold and is available in black or natural.

### Applications

- ✓ Rugged External Flanges
- ✓ Internal Tank Baffles
- ✓ Reinforced Mounting Tabs
- ✓ Fortified Inserts
- ✓ Sturdy Living Hinges
- ✓ Creative Solid Features
- ✓ Reinforced Wall Thickness
- ✓ Strengthened Threads
- ✓ and more

Properties <sup>1</sup>	ASTM Method	Results
<b>Classification</b>		
Melt Index	D-1238 190°C/ 2.16kg (g/10min)	0.003 ± 0.002
Density from Compound	D-1505 (g/cm <sup>3</sup> )	0.9221 ± 0.0017
Density from Molded Plaque	D-1505 (g/cm <sup>3</sup> )	0.92371 ± 0.0051
Tensile Yield Strength	D-638 (psi)	1753 ± 20
Tensile Break Strength	D-638 (psi)	1980 ± 151
Elongation at Break	D-638	530 ± 28
Flexural Modulus	D-790 1% Secant (psi)	30,333 ± 4555
Impact Strength	D-256 (ft. lb/in) -40°C (ARM Impact Test)	9.51 ± 0.87
Environmental Stress Crack Resistance	D-1638 Condition B	0 Failures / 1000 hrs.
Heat Distortion Temperature 66 psi	D-648 (°C)	41.5 ± 0
Heat Distortion Temperature 264 psi	D-648 (°C)	40.9 ± 1

#### 1. All testing conducted on rotationally molded samples.

Analytical testing conducted by Polyhedron Laboratories<sup>®</sup>, Inc., Houston, Texas.

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