

Product Description

M9001RW/RWP is specifically developed for rotational molding applications. M9001RW/RWP is a LLDPE grade with excellent stiffness, good impact strength and toughness. M9001RW/RWP is the recommended material for large water tanks and other general rotational molded articles.

Typical Application

- Large tanks ($\geq 10,000$ liters)
- Agricultural storage tanks
- Material handling containers

Product Characteristics

- Meet the requirements of U.S.21 CFR F.D.A. regulation Part 177.1520 clauses (C) for food contact use
- Meet Thai industrial standard TIS 816-2538 (1995)
- Meet the requirements of AS/NZS 4020 : 2002 for drinking water
- Excellent rigidity and toughness
- Good impact properties
- Broad processing window

Physical properties

Properties	Test Method	Value*	Unit
Resin properties			
Melt Index	ASTM D 1238 @ 190°C, 2.16 kg	3.2	g/10 min
Density	ASTM D 1505	0.939	g/cm ³
Melting Point	ASTM D 2117	127 (260)	°C (°F)
Crystallization Point	ASTM D 2117	113 (236)	°C (°F)
Heat Deflection Temperature (HDT)	ASTM D648	75 (167)	°C (°F)
Vicat Softening Temperature	ASTM D1525	122 (252)	°C (°F)
Mechanical Properties			
Tensile Strength-at-Yield	ASTM D 638 @ Crosshead speed 50 mm/min	210 (21)	kg/cm ² (MPa)
Tensile Strength-at-Break	ASTM D 638 @ Crosshead speed 50 mm/min	280 (28)	kg/cm ² (MPa)
Elongation-at-Break	ASTM D 638 @ Crosshead speed 50 mm/min	1,100	%
Flexural Modulus	ASTM D 790 @ Crosshead speed 2 mm/min	7500 (750)	kg/cm ² (MPa)
Surface Hardness	ASTM D 2240	60	Shore D
ARM Impact Strength @ -40°C	ARM Method (5 mm rotomolded sample)	25 (90)	J/mm (lb-ft)
Brittleness Temperature	ASTM D 746	<-60 (140)	°C
UV Resistance Level	ASTM 2565	8	

*Value quoted are the result of tests on representative samples, and product supplied in all respects.

SCG Plastics Co.,Ltd. Reserved the right to make any improvements to the composition of any grade or product without alteration to the code number.

Processing Techniques

Molding cycles depend on mold materials and its wall thickness, oven temperature, and shot size. Typical oven temperatures should be set between 250 and 300°C.

Product Technical Assistance

For technical assistance or further information on this grade or any other products, please contact Technical service engineer.

Product Available Form

- Natural pellet (M9001RW)
- Powder (35 mesh) (M9001RWP)

Product Handling

- 25 kg loose bag
- 25 kg bag on pallet
- 750 kg big bag

The information presented in this data sheet is offered in good faith. SCG Plastics Company Limited accepts no responsibility for the accuracy or interpretation of the information presented. The users have to establish for themselves the most suitable formulation, production method and control tests, to ensure the uniformity and quality of their products in compliance with all related laws.