

CERTENE™ SGM-140

General Purpose Polystyrene
Muehlstein

Message:

SGM-140 is a certified prime grade specially developed for INJECTION MOLDING thin-wall applications requiring easy mold filling and good overall properties. SGM-140 is a multipurpose low molecular weight resin that offers superior flexural strength, outstanding clarity, exceptional high-flow processability, fast injection cycling, fast filling long flow paths of intricate mold geometry with minimal stresses in moldings. SGM-140 applications include thin-walled containers, cutlery, vials, jars, tumblers, disposable medical ware, audio and video cassette boxes, and toys. SGM-140 complies with FDA regulation 21CFR 177.1640 and with most international regulations concerning the use of Polystyrene in contact with food articles.

General Information			
Features	Fast Molding Cycle		
	Food Contact Acceptable		
	Good Moldability		
	Good Processability		
	High Clarity		
	High Strength		
	Low Molecular Weight		
Uses	Audio Tapes		
	Disposable Tableware		
	Medical/Healthcare Applications		
	Thin-walled Containers		
	Toys		
	Vials		
	Video Cassettes		
Agency Ratings	FDA 21 CFR 177.1640		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.05	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	14	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness ¹ (R-Scale)	75		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (Injection Molded)	2900	MPa	ASTM D638
Tensile Strength ² (Yield, Injection Molded)	42.1	MPa	ASTM D638
Tensile Elongation ³ (Break, Injection Molded)	2.0	%	ASTM D638
Flexural Modulus - 1% Secant ⁴ (Injection Molded)	3030	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (3.18 mm, Injection Molded)	16	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed, Injection Molded)	87.0	°C	ASTM D648
Vicat Softening Temperature ⁵	93.0	°C	ASTM D1525

NOTE

1. Injection molded
2. 5.0 mm/min
3. 5.0 mm/min
4. 1.3 mm/min
5. Injection molded

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

