

SIM-080 High Impact Polystyrene

MELT - 8.0

GRAVITY - 1.05

SIM-080 is a certified prime grade developed for INJECTION MOLDING applications requiring high Strength coupled with superior Gloss properties. **SIM-080** offers exceptional consistency of melt viscosity that combined reduce injection pressure, shorten cycle time and minimize internal molding stresses, resulting in a moldings free of warpage and outstanding impact strength. **SIM-080** complies with FDA regulation 21CFR 177.1640 and with most international regulations concerning the use of Polystyrene in contact with food articles.

Features:

- Fast molding cycle
- Good processability
- High gloss
- High impact resistance
- High strength
- Low warpage

Typical Applications:

- Appliance housings
- Housewares
- Furniture components
- Fan grids
- Scale models
- Toys
- Audio and video cassette shells
- Structural foam moldings
- Blends with Crystal Polystyrene for improvement of mechanical properties

PROPERTIES	ASTM	UNIT	VALUES
PHYSICAL			
Specific Gravity	D792		1.05
Melt Mass-Flow Rate (200°C/5.0 kg)	D1238	g/10 min	8.0
MECHANICAL (Injection Molded)			
Tensile Modulus	D638	psi	330k
Tensile Strength (Yield)	D638	psi	3000
Tensile Elongation (Break)	D638	%	50
Flexural Modulus - 1% Secant (0.051in/min)	D790	psi	340k
Notched Izod Impact (.125 in)	D256	ft-lb/in	2.4
Rockwell Hardness (R-Scale)	D785		60
HDT (264psi, Unannealed)	D648	°F	196
Vicat Softening Temperature	D1525	°F	205