Tuffalloy™ 4270

Thermoplastic

Hapco Inc.

Message:

TUFFALLOY 4270 is a series of Liquid Molding Compounds with thermoplastic properties such as high impact, high heat distortion, and low viscosity. This unique chemistry developed by Hapco to meet today's market demands for prototype and low production parts needs.
THE TUFFALLOY 4270 Series are available in (4) speeds.
The user has the ability to use different speeds of TUFFALLOY 4270, typically using a slower speed initially and increasing to a fast set, 1 minute working life.
PROCESSING:
TUFFALLOY 4270 Series can be pressure cast, vacuum cast, or open cast.
For best results, TUFFALLOY 4274/75 should be used with Hapco's metering/dispensing equipment, RAPIDFIL, MINI FIL, and RAPIDSHOT.

General Information	
Features	Fast Molding Cycle High Heat Resistance High Impact Resistance Low Viscosity
Uses	Automotive Under the Hood Closures Prototyping Tubing
Appearance	Cream
Forms	Liquid
Processing Method	Casting Vacuum Casting

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.13	g/cm³	ASTM D4669
Molding Shrinkage - Flow	0.050 to 0.30	%	ASTM D2566
Weight - per cubic inch	19	g	
Gel Time [1] (25°C)	15.0	min	ASTM D2971
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	79 to 89		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2820	MPa	ASTM D638
Tensile Strength	79.3	MPa	ASTM D638
Tensile Elongation (Break)	7.0	%	ASTM D638
Flexural Modulus	2850	MPa	ASTM D790
Flexural Strength	98.6	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	80	J/m	ASTM D256
Unnotched Izod Impact	> 110	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	90.0	°C	
1.8 MPa, Unannealed	81.0	°C	
Thermoset	**Nominal Value**	**Unit**	**Test Method**
Thermoset Components			
Part A	Mix Ratio by Weight: 100, Mix Ratio by Volume: 100		
Part B	Mix Ratio by Weight: 85, Mix Ratio by Volume: 100		
Thermoset Mix Viscosity [2] (25°C)	250 to 350	cP	ASTM D4878
Demold Time (21°C)	360 to 480	min	Internal Method
NOTE			
1.	100 g		
2.	Range: 250 to 350		

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

WECHAT