Ultralloy™ 800

Thermoplastic

Hapco Inc.

Message:

The ULTRALLOY series of liquid molding compounds are tough, fast cycling, low cost, and easy to use. ULTRALLOY is designed to be used with Liquid Molding, open casting, pressure casting, or vacuum casting processes. ULTRALLOY can be used with silicone, epoxy, urethane, polyester, or aluminum molds. Low cost molds and fast cycle times are two key attributes of ULTRALLOY.
ULTRALLOY is available in several series. Each series has different products with different physical properties. Properties such as elongation, tensile strength, and modulus of elasticity can be selected to mold parts with the correct physical characteristics. Choose the ULTRALLOY material with the exact properties you need, or that are required to meet specifications.
ULTRALLOY is available in opaque white, clear/transparent, and in fire retardant (UL 94V-0) versions. Custom coloring can be achieved by pigmenting ULTRALLOY with Hapco's easy to mix color dispersions. Both opaque and translucent color dispersions are available.
ULTRALLOY can be molded in inexpensive molds, reducing total part cost, for short run programs.
ULTRALLOY is made for prototypes and short runs of plastic parts. ULTRALLOY fills the need for low cost, high performance parts, in volumes less than 10,000 parts per year.
ULTRALLOY 800 SERIES
A series of high strength, fast curing Liquid Molding Compounds. All systems are 1:1 by volume and have low viscosities for easy processing. Tensile strengths from 6,200 psi to12,400 psi and heat distortion temperatures up to 129°C (264°F) are available. Ultralloy 800 Series products are fast, providing a high volume of parts per day.

General Information	
Features	Fast Cure
	Fast Molding Cycle
	Good Toughness
	High Heat Resistance
	High Strength
	Low Viscosity
Uses	Agricultural Applications
	Housings
	Prototyping
	Thin-walled Parts
	Toys
Appearance	Light Brown
Forms	Liquid
Processing Method	Casting
	Vacuum Casting

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.10	g/cm³	ASTM D4669
Molding Shrinkage - Flow	0.20 to 0.70	%	ASTM D2566
Weight - per cubic inch	18	g	
Gel Time [1] (25°C)	40.0	sec	ASTM D2971

Hardness	Nominal Value	Unit	Test Method

Durometer Hardness (Shore D)	85		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2670	MPa	ASTM D638
Tensile Strength	85.5	MPa	ASTM D638
Tensile Elongation (Break)	4.5	%	ASTM D638
Flexural Modulus	2900	MPa	ASTM D790
Flexural Strength	99.3	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	18	J/m	ASTM D256
Unnotched Izod Impact	86	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Unannealed)	129	°C	ASTM D648
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: 80, Mix Ratio by Volume: 100		
Thermoset Mix Viscosity [2] (25°C)	900 to 1100	cP	ASTM D4878
Demold Time (21°C)	8.0	min	Internal Method
NOTE			
1.	100 g		
2.	Range: 900 to 1100		

Recommended distributors for this material

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