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**LEECAST 38-191
 GASOLINE-RESISTANT EPOXY**

Description

LEECAST 38-191 is a proprietary two-part epoxy adhesive and encapsulating compound. It has been used extensively for potting lead wires in UL-listed commercial gasoline pumps. LEECAST 38-191 has exceptional chemical resistance, especially in respect to gasoline, various gasoline alcohol additives, and other aggressive organic solvents. It also features fast room temperature cure and excellent adhesion to a variety of wire coatings and other substrates. It is formulated with enough thixotropy to inhibit sag on vertical surfaces and self-leveling when applied in a bead on horizontal surfaces.

TYPICAL PROPERTIES		
	Part A	Part B
Appearance	Light gray liquid	Black liquid
Thixotropy, 25°C, cps	121,000	146,000
Viscosity, 25°C, cps.	50,900	45,500
Density, lbs/gal	10.8	12.5
Specific Gravity, g/ml	1.3	1.5
Shelf Life, months	6	6

TYPICAL HANDLING PROPERTIES		
	Part A	Part B
Mix Ratio, by volume	100	20
Mix Ratio, by weight	100	23
Gel Time, 25°C, 100 g, min.	32	
Cure Time, 25°C,		
Green Strength, hours	15	
Full Strength, days	7	
Hardness, 25°C, Shore D	85	

CHEMICAL RESISTANCE¹			
	Fuel C/methanol	Fuel C/ethanol	Fuel C only
Weight Gain, %	0.0066	0.0007	0.0004
Hardness Change, %	Nil	Nil	Nil
Compressive Strength Increase, %	1.01	0.09	0.11

¹ Fume resistance, 8 days @ 25°C

UL Crush Test**METHOD**

Cylindrical specimens of LEECAST 38-191 were exposed to saturated vapors for a period of 168 hours. Following these exposures, the samples were placed between two parallel plates and crushed with a compression-testing machine having a crosshead speed of 0.1 in/min. The load was applied perpendicular to the axis of the cylindrical samples and the compressive force required to crack and break the specimens was recorded.

RESULTS

Sample Conditioning	Sample Crush Force (lb.)	Percent of As Received
As received	3897	100
Fuel C	3633	93
Fuel A	3443	88
IRM 903 Oil	3410	88
85% Fuel C/ 15% Methanol	3510	90
85% Fuel C/ 15% Ethanol	3613	93

The resistance to crushing following sample conditioning was higher than 85 percent of the As Received value.