

INSULCAST® 116 FR Epoxy Potting & Casting Compound



Easy-to-Use Potting Solution for High Volume Applications



Insulcast 116FR is a general purpose epoxy potting and casting compound used for the manufacture of power supplies, sensors, controllers, and other electronic insulation applications. Its 1:1 mix ratio offers convenience and simplicity to high production rate applications that require production line manual mixing or automated dispensing. With a flowable viscosity and long pot life, Insulcast 116 FR is engineered to produce quality, void-free castings at room or elevated temperature that meet the thermal, electrical, and mechanical demands of most applications. Insulcast 116 FR FC is also available as a faster cure alternative.

Benefits

Efficient Processing

1:1 mix ratio allows for easy manual mixing or automated dispensing.
Can be cured at either room and elevated temperature.

Environmental Protection

Hard, durable adhesive bond (shore hardness 75D) protects electrical components from moisture, chemicals/solvents, and piracy.

Enhanced Durability

Moderate thermal conductivity (0.649 W/mK) combined with high dielectric strength (420 Volts/mil) ensures components operate as designed while offering protection from overheating, thermal stress, and vibration.

Flame Retardancy

Meets the flammability requirement of UL94-V0.



116 FR Epoxy Potting & Casting Compound



Typical Properties

	116 FR	116 FR FC
Color	Black	Black
Mixed Viscosity, CP	8,100	9,800
Pot Life, 100g mass, min.	90	30 - 45
Cure Cycle	24 hr @ 77°F (25°C)	16 hr @77°F (25°C)
Shelf Life, 25°C, months	12	12
Shore Hardness	75D	75D
Tensile Elongation, %	8	5 - 7
Thermal Conductivity, W/mK	0.649	0.649
Service Temperature, °F (°C)	-40°F - 221°F (-40°C - 105°C)	-40°F - 221°F (-40°C - 105°C)
Dielectric Strength, volts/mil	420	420
Dielectric Constant, 1 KHz	4.4	4.4

Targeted for large volume applications, Insulcast 116 FR and 116 FR FC are packaged in 1 gallon, 5 gallon, and 55 gallon units.

Refer to our Technical Data Sheet and Safety Data Sheet for additional technical and safety information

The technical information, recommendations and other statements contained in this sheet are based upon good faith tests or experience that ITW Performance Polymers believes are reliable, but the accuracy or completeness of such information is not guaranteed. The information provided is not intended to substitute for the customers' own testing.

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Improve Performance & Protect Electronic Assemblies from:
Overheating, thermal stress, piracy, vibration, and environmental exposure with Insulcast 116 FR.