

INSULCAST EPOXIES

| | Description | Color | Mix Ratio by Weight (with Curing Agent) | Viscosity (Mixed, cP) | Cure Cycle | Shore Hardness | Thermal Conductivity, (W/m °K) | Glass Transition Point, (°C) | Dielectric Constant, (KHz) | Dielectric Strength, (Volts/Mil) | Volume Resistivity, (Ohm-cm) | Coefficient of Thermal Expansion (°C) | Service Temperature, (°C) | UL Flammability Rating |
|-----------------------------|---|-----------------|---|-----------------------|-------------|----------------|--------------------------------|------------------------------|----------------------------|----------------------------------|------------------------------|---------------------------------------|---------------------------|------------------------|
| Insulcast 42 | Unique low viscosity co-polymer that withstands severe thermal shock, exhibits low moisture absorption & excellent dielectric insulation. | Black | 100:10 | 15,000 | 24hr @ 25°C | 75A | 0.604 | -60 | 4.00 | 440 | 1x10 ¹⁵ | 45x10 ⁻⁶ | -40 to +105 | 94V-0 |
| Insulcast 101 | Has excellent chemical resistance to a broad range of acids, bases and organic solvents. | Black | 1:1 | 10,000 | 48hr @ 25°C | 80D | 0.468 | 80 | 4.40 | 410 | 1x10 ¹⁴ | 30x10 ⁻⁶ | -55 to +105 | None |
| Insulcast 116 FR | Easy-to-use, general purpose potting and casting compound. The convenient 1:1 mix ratio makes it ideal for production line mixing as well as for automatic dispensing. | Black | 1:1 | 8,100 | 24hr @ 25°C | 75D | 0.432 | 80 | 4.40 | 420 | 1x10 ¹⁴ | 30x10 ⁻⁶ | -40 to +105 | 94V-0 |
| Insulcast 116 FR FC | Easy-to-use, general purpose, fast set potting and casting compound. | Black | 1:1 | 9,800 | 16hr @ 25°C | 75D | 0.432 | 80 | 4.40 | 420 | 1x10 ¹⁴ | 30x10 ⁻⁶ | -40 to +105 | 94V-0 |
| Insulcast 125 | Low viscosity, general purpose, good machinability. | Black | 100:6-7 (Icure 9) | 3,000 | 36hr @ 25°C | 80D | 0.648 | 80 | 4.2 | 415 | 5x10 ¹⁵ | 48x10 ⁻⁶ | -40 to +105 | None |
| Insulcast 136 | Easy to use, excellent adhesion to metals, ceramics and most plastics. | Black | 100: 6-7 (Icure 9) | 30,000 | 36hr @ 25°C | 87D | 0.72 | 80 | 4.80 | 440 | 5x10 ¹⁶ | 40x10 ⁻⁶ | -40 to +105 | None |
| Insulcast 140 FR | Very high thermal conductivity. | Black | 100: 3-4 (Icure 11B) | 50,000 | 3hr @ 100°C | 90-95D | 2.88 | 100 | 6.30 | 420 | 1x10 ¹⁵ | 26x10 ⁻⁶ | -40 to +105 | 94V-0 |
| Insulcast 333 | Good thermal conductivity, superior impact resistance with good adhesion to most substrates. | Black / Neutral | 100:6 (Icure 9) | 2,000 | 36hr @ 25°C | 85D | 0.618 | 80 | 4.4 | 410 | 1x10 ¹⁵ | 48x10 ⁻⁶ | -40 to +105 | 94V-0 |
| Insulcast 502 | Unfilled, excellent electrical & physical properties. | Clear | 100:13 (Icure 9) | 200 | 36hr @ 25°C | 85D | 0.23 | 85 | 4.0 | 425 | 2x10 ¹⁵ | 75x10 ⁻⁶ | -40 to +105 | None |
| Insulcast 504 | Unfilled, excellent electrical & physical properties. | Black | 100:12 (Icure 9) | 200 | 36hr @ 25°C | 75D | 0.23 | 75 | 4.0 | 525 | 2.6x10 ¹⁴ | 61x10 ⁻⁶ | -40 to +105 | None |
| Insulcast LN 1-05 | Non-cracking compound that is suitable for large potting applications. | Black | 100:14 | 5,000 | 36hr @ 25°C | 85D | 0.648 | 75 | 5.15 | 400 | 6x10 ¹⁵ | 32x10 ⁻⁶ | -40 to +105 | None |
| Insulcast 961 FR | Low density syntactic foam. | Black | 100:11-12 (Icure 9) | 7,000 | 36hr @ 25°C | 70D | 0.172 | 80 | 2.70 | 375 | 1x10 ¹³ | 40x10 ⁻⁶ | -40 to +105 | None |
| Insulcast 985 FR | Two-part, heat cure. Semi-flexible flame retardent compound, superior shock resistance. | Black | 1:1 | 50,000 | 16hr @ 85°C | 70D | 0.504 | 80 | 3.80 | 425 | 6x10 ¹⁵ | 32x10 ⁻⁶ | -55 to +155 | 94V-0 |
| Insulcast 987 CM | Semi-flexible potting compound that exhibits excellent electrical & physical properties. | Neutral | 2:3 | 60,000 | 16hr @ 85°C | 65D | 0.417 | 80 | 4.90 | 375 | 1x10 ¹⁴ | 45x10 ⁻⁶ | -40 to +105 | None |
| Insulcast 3230 LV | Low viscosity, highly filled formulation that exhibits excellent electrical properties and unusually high thermal conductivity with low thermal expansion. | Black | 100: 5-7 (Icure 9) | 6,000 | 36hr @ 25°C | 90D | 1.20 | 80 | 6.30 | 475 | 1.3x10 ¹⁶ | 28x10 ⁻⁶ | -40 to +105 | None |
| Insulgel 50 FC | Soft gel, fast cure compound. The product does not require vacuum de-gassing to assure bubble-free castings. | Black | 100:25 | 500 | 12hr @ 25°C | 50A | 0.23 | 5 | 3.50 | 425 | 1x10 ¹⁴ | 45x10 ⁻⁶ | -55 to +155 | None |
| Insulgel 70 CC FR NS | Unique, flexible epoxy compound that exhibits superior thermal shock resistance. It provides reduced shrinkage and low CTE resulting in decreased stress and improved adhesion. | Black | 100:10-11 | 3,000 | 24hr @ 25°C | 50D | 0.518 | 5 | 3.6 | 400 | 7x10 ¹² | 90x10 ⁻⁶ | -40 to +105 | 94V-0 |
| Insulgel 90 | Soft gel, low viscosity compound that does not normally require vacuum de-gassing to void-free castings & imbedments. | Clear | 100:25 | 200 | 16hr @ 25°C | 90A | 0.23 | 5 | 3.50 | 375 | 1x10 ¹⁴ | 45x10 ⁻⁶ | -55 to +155 | None |