



## High-Temperature Potting Solution for Optimal Quality and Performance



Insulcast RTVS 27 is a low viscosity reversion resistant RTV silicone used for the manufacture of power supplies, sensors, controllers, and other electronic insulation applications. Insulcast RTVS 27 combines the virtues of low temperature flexibility, excellent electrical properties, high temperature resistance, and easy removal for component replacement or repair.

With a flowable viscosity and long pot life, Insulcast RTVS 27 is engineered to produce quality, void-free castings at room or elevated temperature while its 1:1 mix ratio offers convenience and simplicity to high production rate applications that require production line manual mixing or automated dispensing. Insulcast RTVS 27 is also available in faster cure, lower viscosity, and higher thermal conductivity alternatives.

### Benefits

#### Enhanced Durability

Expansive application temperature range (-67°F - 399°F) combined with high elongation characteristic (135%) provide protection from thermal stresses and allow for as-designed performance even in the most demanding environments.

#### Efficient Processing

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

#### Readily Repairable

Low modulus and hardness characteristics allows for easy removal for component replacement or repair.

#### Flame Retardancy

Meets the flammability requirement of UL94-V0.

# INSULCAST® RTVS 27 Silicone Potting & Casting Compound



## Typical Properties

	RTVS 27	RTVS 27 FC	RTVS 27 LV	RTVS 27 HTC
Color	Black	Black	Dark Grey	Black
Mixed Viscosity, CP	2,900	2,900	1,200	6,000
Pot Life @ 25°C, min	60 - 90	<5	120	60
Cure Cycle	24 hr @ 77°F (25°C)	1 hr @ 77°F (25°C)	24 hr @ 77°F (25°C)	24 hr @ 77°F (25°C)
Shelf Life, 25°C, months	12	12	12	12
Shore Hardness	60A	60A	60A	60A
Tensile Elongation, %	135	135	100	60
Thermal Conductivity, W/mK	0.31	0.31	0.31	1.0
Service Temperature, °C	-67°F - 399°F (-55°C - 204°C)	-67°F - 399°F (-55°C - 204°C)	-67°F - 399°F (-55°C - 204°C)	-67°F - 450°F (-55°C - 232°C)
Dielectric Strength, volts/mil	500	550	500	500
Dielectric Constant, 1 KHz	3.00	3.00	3.40	4.00

Targeted for large volume applications, RTVS 27 products 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, vibration, and environmental exposure with  
Insulcast RTVS 27 compounds.