

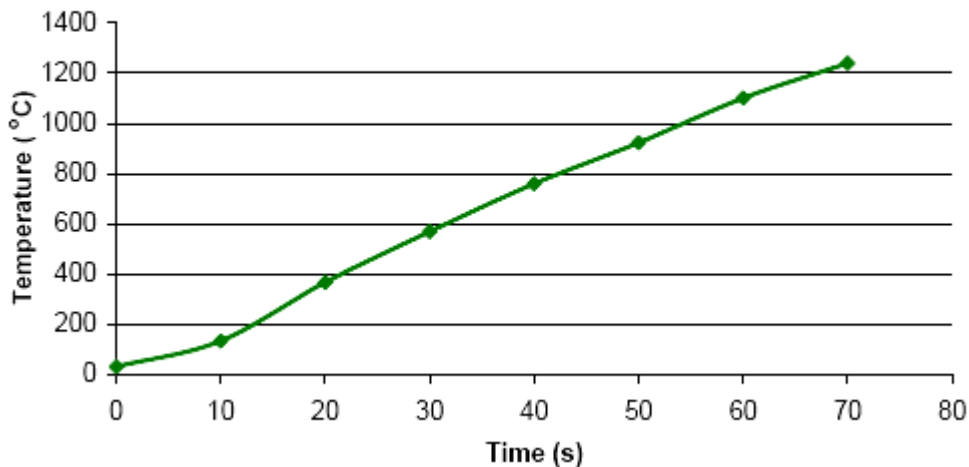
# Silar<sup>®</sup> Microwave Absorbent Ceramics

*Ceramic Products with Silar<sup>®</sup> Silicon Carbide Whiskers for Advanced Microwave Applications*

Silar<sup>®</sup> Microwave Absorbent Ceramics are a unique class of materials composed of an engineered ceramic matrix containing Silar<sup>®</sup> Silicon Carbide Whiskers yielding a high-tech composite that heats rapidly in a microwave field, withstands very high temperatures, has high strength, toughness and crack resistance, and is thermal shock resistant. Silar<sup>®</sup> Microwave Absorbent Ceramics properties include:

- Rapid temperature rise: 1200 °C per minute is easily attainable
- Chemically inert and stable: Silar<sup>®</sup> is exceptionally stable and will not react with anything
- No arcing or sparking: Silar<sup>®</sup> will not arc or spark in a microwave field
- Functional at all frequencies: Silar<sup>®</sup> will heat equally well at 915 MHz and 2450 MHz
- No acceleration times: Silar<sup>®</sup> provides instant heat from room temperature up to service temperature without delayed acceleration times
- No runaway heat: Silar<sup>®</sup> absorbs consistently and evenly across all temperature ranges, eliminating the “runaway heat” problem in other materials having increased dielectric loss tangents as temperatures rise.

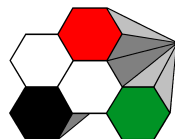
**Time vs. Temperature**  
915 MHz Radiation at 700 watts



Silar<sup>®</sup> Microwave Absorbent Ceramics have a wide range of applications in the microwave arena, including:

- Microwave cooking, food processing, and cookware
- Industrial microwave heating
- Microwave drying and curing of low-water content materials
- Microwave melting of metals
- Safety and control devices for microwave ovens

Contact us to learn more about Silar<sup>®</sup> Microwave Absorbent Ceramics and how they can benefit your application.



**Advanced  
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