

TSE 3221S

**Product description**

**TSE 3221S** is a translucent one-component, heat curable (addition cure) silicone adhesive designed for sealing and coating. TSE 3221S adheres well to a variety of substrates, such as metals, plastics, ceramics and glass without the use of a primer.

**Key Performance Properties**

- Ready to use - one component
- Translucent
- Flowable
- Heat accelerated cure
- Excellent adhesion to many substrates – plastics, metals, ceramics and glass
- Non-corrosive to metals
- Excellent high and low temperature resistance

**Application**

- Sealing and coating for hybrid ICs, semiconductor modules, automotive electronic units, communication devices, home appliance assemblies and etc.
- Adhesive for heat cured silicone rubber
- Base for silicone printing inks

**Typical Product Data**

Uncured Properties		TSE 3221 S
Appearance		translucent, flowable
Viscosity (@ 23°C)	Pa·s	58
Cured Properties		(1h @ 150°C)
Appearance		Elastic rubber
Specific gravity (@ 23°C)	g/cm <sup>3</sup>	1.03
Hardness	Shore A	28
Tensile strength	MPa	2.8
Elongation	%	370
Adhesive strength*	MPa	2.5
Thermal expansion coefficient	1/K	$2.1 \cdot 10^{-4}$
Thermal conductivity	W/m·K	0.18
Volume resistivity	ohm · cm	$6.0 \cdot 10^{14}$
Dielectric strength	kV/mm	23
Dielectric constant (60Hz)		2.8
Dielectric loss (60Hz)		0.001

\* Aluminium Lap shear



<b>Specifications</b>	Typical product data values should not be used as specification. Assistance and specifications are available by contacting Momentive performance materials Technical Service RTV1 and RTV2.
<b>Instructions for Use</b>	<p><b>General instructions for use and storage</b></p> <p>Store at cold temperature (0~10°C) to prevent a viscosity increase. When returning to room temperature, allow the contents to return to room temperature before opening the container to avoid condensation.</p> <p>All parts should be as clean and dry as possible prior to application</p> <p>Materials such as water, sulphur, nitrogen compounds, organic metallic salts, phosphorous compounds etc. contained in the surface of the substrate can inhibit curing. A sample patch should always be conducted before proceeding to determine compatibility.</p>
<b>Adhesion Capability</b>	<p><b>Suitable substrates</b></p> <p>Metals: Aluminium, Copper, Ni plate; Stainless steel Plastics: PPS, PBT, Epoxy resin, Polyester, Phenolic resin Rubbers: Heat cured silicone rubber Inorganics: Glass, Ceramics</p> <p><b>Not suitable substrates</b></p> <p>Plastics: PP, PE, Fluorocarbon resin Rubbers: Sulphur vulcanized rubbers, Fluorocarbon rubber</p>
<b>Handling and Safety</b>	Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information for solvents and other chemicals used with the Momentive performance materials products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.
<b>Storage and Warranty Period</b>	The shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 10° C.
<b>Availability</b>	<b>TSE 3221 S</b> is available in 1kg cans.



PRINCIPAL LOCATIONS – Regional Information

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	• UA, Silanes, Resins, and Specialties	T 800.334.4674	F 304.746.1623
	• RTV Products-Elastomers	T 800.332.3390	F 304.746.1623
	• Sealants and Adhesives & Construction	T 877.943.7325	F 304.746.1654
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