



Technical Data Sheet

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QSi 214 Specialty Silicone Coating

PRODUCT DESCRIPTION

QSi 214 is a low viscosity, two component, addition cure silicone elastomer which will cure at room temperature or at elevated temperatures. It has a low viscosity, which allows for ease of flow around complex parts, providing electrical insulation and shock resistance.

KEY FEATURES

- Medium viscosity
- Fast RT cure
- Low linear shrinkage
- Transparent

TYPICAL PROPERTIES

UNCATALYZED		
TEST	QSi 214A	QSi 214B
Appearance	Transparent	Transparent
Viscosity	4,550 cps	5,200 cps
Specific Gravity	1.00	1.00

CATALYZED	
MIX RATIO 1:1 by weight	
PROPERTY	RESULT
Gel Time at 25C*	28 minutes

*Gel time is defined as the time required for the material to become a solid or a semi-solid.

CURED PROPERTIES	
30 minutes at 150C	
PROPERTY	RESULT
Durometer, Shore A	40
Tensile	650 psi
Elongation	150%

ADDITIONAL PROPERTIES	
Thermal Conductivity	0.18 W/m-K
Refractive Index	1.40
Useful Temperature Range	-55 – 204C



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CURE CHARACTERISTICS

QSi 214A is catalyzed with QSi 214B at a 1:1 ratio by weight. In order to achieve optimum performance the same lot number of QSi 214A and QSi 214B should be used.

The curing process begins as soon as the catalyst is mixed with the base. The material will cure as described in the data above under normal temperature (25C). Because this system is sensitive to heat cure speed will increase with increased temperature. In addition, if the product is to be used with aggressive resins such as high styrene polyester resin, it is recommended that the rubber be allowed to cure for 48 hours.

MIXING

QSi recommends that the catalyzed material be tested on a small area of the mold prior to use.

Combine one part of QSi 214A with one part of QSi 214B by weight into a clean, compatible container. The volume of the container should be 3-4 times the volume of the material to be mixed. Mix by hand or with mixing equipment until a homogeneous mixture is obtained. Accurate weighing of all components, on a suitable scale, is essential for optimal product performance when mixing by hand.

DE-AERATION

Air trapped during mixing should be removed by vacuum at 29 inches of mercury. During the process the material will expand and intermittent evacuation may be required. Typically after releasing the vacuum 2-3 times the mass will collapse on itself at which time the vacuum should be left on for an additional 2-4 minutes.

Machine mixed material does not normally need to be de-aired.

STORAGE AND SHELF LIFE

If QSi 214A and QSi 214B are stored in their original unopened containers, in an environment that does not exceed 38C (100F) then QSi will warranty the material for a period of 12 months from the date of shipment.

DISCLAIMER

The technical data listed is provided for reference only and is not intended as product specifications. QSi has the capability to customize products as requested. For sales and technical assistance please contact customer service at **(804) 271-9010** or **1-800-852-3147**.

Visit our website at www.quantumsilicones.com.



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