



# Anabond®

## 652

Technical Data Sheet  
Revised on Feb' 2015  
Revision no. : 01

### PRODUCT DESCRIPTION

Technology	Silicone
Chemical type	Non curing
Appearance	Smooth paste
Colour	Milky white
Application	Heat transfer / Heat sink compound

Anabond 652 is a heat transfer compound that is formulated with polydimethyl siloxane fluids in combination with metallic oxide fillers to provide superior thermal conductivity. It is designed for use as a heat transfer compound in both the electrical, and the electronic industries, and is characterized by its high thermal conductivity, high dielectric constant, and high dissipation factor. Anabond 652 is an ideal material for use in thermocouples, power diodes, transistors, semiconductors, etc. Anabond 652 exhibits excellent long-term storage stability, without oil separation.

### Typical Properties

Specific gravity at 30 ± 2 °C ATM*-R004 (JIS* K6820)	g/cc	2.00 – 2.50
Weight loss at 200±5 °C ATM-R009	%	1.0 – 5.0
Viscosity at 30°C, ATM R006 (JIS K6820)	poise	52,000 – 62,000
Flash Point		Refer MSDS

### Electrical Properties

Dielectric Strength	kV/mm	7.2
Volume resistivity	ohms-cm	8.79 X 10 <sup>14</sup>
Dissipation factor		
• at 100 Hz		0.2 X 10 <sup>-4</sup>
• at 1.0 Hz		0.025
Dielectric constant		
• at 100 Hz	kV/mm	4.8
• at 1.0 Hz		5.0
Arc resistance	Sec	77

### Thermal Properties

Thermal conductivity		
• at 35 °C	W/mK	0.399
• at 66 °C		0.403
• at 86 °C		0.437

### Operating parameters

Application temperature	°C	10 to 40
In service temperature	°C	-50 to +200
Short exposure	°C	220

### General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

### Handling

Before handling, read product safety data sheets (MSDS) and container labels for safe use.

### Directions for use

#### Substrate preparation

Surfaces to be adhered or sealed should be free of dirt, oil and other contaminants. For best performance clean the surface with a solvent such as isopropyl alcohol, acetone or methyl ethyl ketone or with coarse lint free cloth.

#### Method of application

Adhesive/sealant can be applied directly from its collapsible tube.

A plastic nozzle is supplied which can be cut to the desired orifice and shape to facilitate application.

The material may be applied by brushing, spraying, or dabbing the product on the surface to be lubricated or sealed thickness.

Excess material can be easily wiped away with a dry cloth or non-polar solvents

### Storage

The optimal storage condition is 8°C to 30°C. Storage below or more than the temperature specified, has impact on the product properties.

Material removed from containers may be contaminated during use. Do not refill the product to the container.



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Keep the container tightly closed when not in use.

If additional information is required, please contact our local customer service representative.

## Shelf life

When stored at or below 30°C, in the original unopened containers, this product has a shelf life of 12 months from the date of manufacture.

## Packing

Adhesive/sealant is available in 250g / 500g / 1 kg in HDPE container or 50g / 100g in collapsible aluminium tube.

## Conversions

(°C x 1.8) + 32 = °F  
kV/mm x 25.4 = V/mil  
kg/cm<sup>2</sup> = 10.2 x N/mm<sup>2</sup>  
mm / 25.4 = inches  
mPa·s = cP  
MPa x 145 = psi  
μm / 25.4 = mil  
N x 0.225 = lb  
N/mm x 5.71 = lb/in  
N/mm<sup>2</sup> x 145 = psi  
N'm x 8.851 = lb'in  
N'm x 0.142 = oz'in

Anabond disclaims liability for any incidental or consequential damages of any kind, including lost profits.

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It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof.

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