

#### **Technical Data Sheet**



# InvisiSil\* IVS4622

## **Description**

InvisiSil IVS4622 is a two-component, addition cure silicone rubber designed for optical device coating. This product cures with heat to an elastomer.

## **Key Features and Benefits**

- Low viscosity allows for excellent flowability
- Excellent transparency
- Cures fast with heat and adheres to parts
- Convenient 1:1 mix ratio by weight
- High Purity
- Shore A 60

## **Potential Applications**

Optical device coating

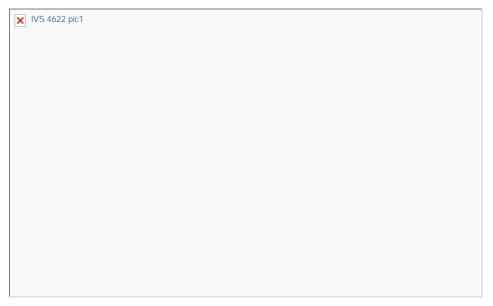
# **Typical Property Data**

UNCURED PROPERTIES		InvisiSil IVS4622(A)	InvisiSilIVS4622(B)	
Appearance		Transparent	Transparent ~ Slightly hazy*1	
Viscosity (23°C)	Pa·s {P}	4.2 {42}	1.5 {15}	
Mixing ratio by weight		1:1		
Viscosity after mixing (23°C)	Pa·s {P}	2.4 {24}		
Pot life (23°C)	h	8		
Refractive index (n <sub>D</sub> <sup>25</sup> )		1.41	1.41	
CURED PROPERTIES (Cure condition: 1h (Note: When using as LED encapsulant, tv	,	low *2 is recommended)		
Density (23°C)	g/cm <sup>3</sup>	1.04		
Hardness (Type A)		55	55	
Tensile strength	MPa {kgf/cm <sup>2</sup> }	7.2 {73}		
Elongation	%	100		
Lap shear strength <sup>*3</sup>	MPa {kgf/cm <sup>2</sup> }	3.2 {33	3.2 {33}	
Volume resistivity	Ω·cm	2×10 <sup>15</sup>		

Dielectric strength	kV/mm	30	
Dielectric constant (60Hz)		2.75	
Dissipation factor (60Hz)		0.0005	

<sup>\*1</sup> May become cloudy by moisture

<sup>\*4</sup> JIS Z 0208 Thickness: 1mm Condition: 40°C, 90%RH



#### **General Instructions For Use**

- 1. Weight out (A) and (B) to a clean container 3~4 times larger than the volume of silicone rubber compound to be used.
- 2. Mix (A) and (B) thoroughly with clean tools.
- 3. Deaerate the mixture under vacuum to remove air entrapped during mixing.
- 4. Apply and cure with heat. When using as LED encapsulant, a two-step cure process is recommended (first cure: 2h at 80°C, second cure: 1h at 150°C).

Note: All parts should be as clean and dry as possible prior to application. Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing. It is recommended that a preliminary test be performed to determine the compatibility

#### **PACKAGING**

- InvisiSil IVS4622(A): 500g bottle available in cases of 9
- InvisiSil IVS4622(B): 500g bottle available in cases of 9

### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

#### **Product Safety, Handling and Storage**

Customers should review the latest Material Safety Data Sheet (MSDS) and label for product safety information, safe handling instructions, personal

<sup>\*2</sup> Recommended cure condition: first cure; 2h at 80°C, second cure; 1h at 150°C

<sup>\*3</sup> Substrate: PPA (Polyphthalamide) Treated 2h at 150°C AMODEL A-4122NL

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For product prices, availability, or order placement, contact our customer service by visiting momentive.com/ContactSilicones.

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