



IVS4752

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Description

IVS4752 is a two-component, addition cure silicone rubber developed as an optical device coating. This product cures with heat to an elastomer.

Key Features and Benefits

- Low viscosity allows for excellent flowability
- Excellent transparency
- Convenient 1:1 mix ratio by weight
- Cures fast with heat and adheres to parts
- Applicable to transfer molding or compression molding encapsulation

Typical Physical Properties

Uncured Properties	IVS4742(A)	IVS4742(B)
Appearance	colourless	colourless *1
Viscosity (23°C) Pa-s	10	2.0
Mixing ratio by weight	1:1	
Viscosity after mixing (23°C) Pa-s	5.0	
Pot life (23°C) h	24	
Refractive index (nD 25)	1.41	

Cured Properties (Cured condition: 1h @ 150°C) (Note: When using as LED encapsulant, two-step cure process as shown below *2 is recommended)		
Density (23°C)	g/cm ³	1.05
Hardness (Type A)		72
Tensile strength	MPa	5.0
Elongation	%	70
Lap shear strength*3	MPa	2.6
Volume resistivity	Ω-cm	1×10 ¹⁶
Dielectric strength	kV/mm	30

Dielectric constant (60Hz)		2.8
Dissipation factor (60Hz)		0.001
Oxygen permeability (1mm)	cm3/m2 day atm	20,000
Moisture permeability (1mm)*4	g/m2·24h	100
Linear expansion	1/K	2.7×10-4

*1 May become cloudy by moisture

*2 Recommended cure condition: first cure; 4h at 80°C, second cure; 2h at 150°C

*3 Substrate: PPA (Polyphthalamide)

*4 JIS Z 0208 Condition: 40°C, 90%RH

Typical property data values should not be used as specifications

Potential Applications

- Light Emitting Diode
- LED
- Opto Device
- Junction

Patent Status

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