

# INVISISIL™ OP1221 UV-curable Silicone Gel

## Product Description

INVISISIL™ OP1221 is a one-component silicone gel and an excellent candidate for optical bonding applications. This product is cured by UV exposure to become a soft, tacky gel in a matter of seconds. The supple quality and cushioning impact of this product can enable exceptional protection for electronic assemblies against mechanical impact and vibration.

## Key Features and Typical Benefits

- Convenient one component formulation
- Relatively longer storage period; Shelf life of 9 months
- UV curable
- Soft, tacky, and sticky gel
- Excellent candidate for larger size displays
- Easier processing can lead to potential equipment cost savings
- Can absorb shock and protect delicate mechanical components from vibration
- Excellent resistance to corrosion

## Typical Physical Properties

	Unit	OP1221
<b>Uncured Properties at 23°C</b>		
Appearance		Transparent
Viscosity at 23°C	Pas	7.5
Specific Gravity	g/cm <sup>3</sup>	0.98
Refractive Index		1.41
Transmittance at 400nm	%	99
<b>Cured properties (UV LED 1000mJ/cm<sup>2</sup> + 0.5hr at 60°C)</b>		
Penetration	[1/4 cone] – x10	35
Lap Shear Strength at 0.3mm (Glass to Glass) *1	MPa	0.3
Lap Shear Strength at 0.3mm (Glass to PC) *1	MPa	0.3
Elongation	%	35
Dielectric Constant at 60Hz		2.8
Volume Expansion	ppm	330
Thermal Conductivity	W/mK	0.17
Haze		<0.1
Yellowness Index (D1925)		<0.3
b*		<0.1
Shelf life at 23°C	months	9

\*1 Curing condition: UV LED 1000mJ/cm<sup>2</sup> + 3 days at 23°C

Typical properties are average data and are not to be used as or to develop product specifications.

## General Considerations for Use

- Materials such as water, sulfur, nitrogen compounds, organic metallic salts, phosphorus compounds, etc. contained in the surface of the substrate can inhibit curing.
- A sample patch should always be tested in order to determine compatibility.
- All parts should be as clean and dry as possible prior to application.
- Eye protection and protective gloves should always be worn when working with this product.
- Always maintain adequate ventilation in the workplace.
- Keep out of the reach of children.

## Available Packages

- 18Kg Steel Pail
- 9Kg Plastic Bottle

## Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the 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

Store in a cool dry place out of direct sunlight, and below 23°C. Shelf life at room temperature (23°C) is 9 months.

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment, if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

## Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular application(s).

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