



## Liquid Optical Bonding for Display



**Momentive Performance Materials provides leading-edge silicone technologies to help its customers meet performance and productivity challenges in a wide range of automotive and electronic applications.**

Momentive is a pioneer in developing solutions for silicone optical bonding, with a portfolio of proven materials that are in wide use around the world. Momentive offers a wide range of off-the-shelf solutions to help deliver design flexibility and long-term reliability to components operating under harsh conditions.

### Key Features

- High Transmittance
- Low cure shrinkage
- Good elasticity
- High stability, low modulus

### Typical Benefits

- Optical clarity
- Stability/low modulus to help avoid Mura effect
- CTE mismatch relief
- Durable in harsh environments
- Outgas permeability for use on plastics
- Wide working temperature range

### Potential Applications

- Displays for high ambient light environments
- Automotive, consumer, and industrial electronics
- Heavy-duty displays and touch-screens
- Direct view technologies
- Optical potting and other functional applications
- Display, screen, and touch sensor layers in structure

## Optical Products and Typical Properties

(selected grades only; please contact us for material selection support)

		OP2131SD	OP1131D	OP2012S	OP1012	SN3001	SN1001	OP1912 (translucent)	OP1912-B (black)
Cure-type		UV	UV	Thermal	Thermal	Thermal (Snap cure)	Thermal (Snap cure)	Thermal	Thermal
Cure condition *1		3000mJ/cm2	3000mJ/cm2	60Cx30min	60Cx30min	Gel time 23Cx30min. Full adhesion. 2 days	Gel time 23Cx18min. Full adhesion. 2 days	60Cx30min	60Cx30min
Viscosity (mPa.s)		2300	2900	800	800	1000	1000	98800	98800
Adhesion (MPa) *2		0.3	0.4	0.4	0.2	0.6	0.6	-	-
Hardness		7 (E)	Gel	25(E)	Gel	Gel	Gel	Gel	Gel
Transmittance (%) *3	400nm	99	99	99	99	99	99	-	-
	800nm	99	99	99	99	99	99	-	-
Color coordinate (D65)	L*	99.89	99.7	99.83	99.96	99.88	99.88	-	-
	a*	-0.14	-0.14	-0.18	-0.16	-0.15	-0.15	-	-
	b*	0.08	0.12	0.02	0.01	0.05	0.03	-	-
Haze (%)		0.2	0.2	0.05	0.01	0.05	0.05	-	-

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

Footnotes: \*1 Metal halide/Oven, \*2 GL-GL 150um thickness, \*3 1mm thickness



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#### Patent Status

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#### Product Safety, Handling and Storage

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

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