

## Adhesives for Electronic Displays and Lighting



### GK Adhesives: Lamination Adhesives with Low Refractive Index and strong adhesion

Our GK adhesives are distinguished by their unique combination of high bond strength AND low refractive index. The GK products exhibit strong adhesion to various substrates, including glass, PMMA, PET, PC, and metals.

Product	% solids	RI @ 589nm	Viscosity @25°C CPS	T-peel, PET/PET @25°C g/cm	Lap Shear PET/Glass, @25°C g/cm <sup>2</sup>
GK-731	35	1.337	2000	700	2800
GK-751	50	1.357	2000	440	2800
GK-731-S1	100	1.335	15000@90C	220	na

**GK-731** combines low index of 1.33 AND strong adhesion to various substrates.

**GK-731-S1** is a 100% solids version of GK-731.

**GK-751** has an index of 1.35. It is a lower cost version of GK-731.

These products have multiple potential applications in electronic displays and in lighting systems (see details below).

**The MY Product line:** Lamination Adhesives with Low Refractive Index and 100% solids.

These products have Refractive index as low as 1.30, and 100% solids content (meaning No solvents). Their adhesion is significantly lower, compared to GK products. They are suitable to some applications (see below).

Product	RI @ 950nm	Adhesion g/cm <sup>2</sup>	Elastic Modulus MPa	Viscosity CPS	Tensile MPa	Elongation at Break %	Shelf Life, months
MY-130	1.303	na	<1	120	<0.2	<10	12
MY-132-A	1.322	7	0.4	2600	0.3	80	12
MY-133-EA	1.333	27	3.6	2300	1.0	45	9
MY-136	1.360	110	20	750	4.7	83	12

### Applications for GK and MY product lines:

Our GK products can be used advantageously in the following applications: Constructing of improved, integrated Back-Light Units (BLU); Light based Touchscreens; Auto-Stereoscopic 3D displays; Virtual reality headsets; Light-Guides for lighting systems; and nanotech transparent conductors. The low index enables Total Internal Reflection of light that would otherwise leak out of the light-guiding layer. This enables bonding of a FTIR Touchscreen to the LCD, or the integration of backlight unit light-guide with the adjacent reflector or optical film.

In the construction of nanotech transparent conducting films, the low index enables better extraction of light; and in auto stereoscopic displays, the bigger index gap enables better separation between the 2 stereoscopic images.

The low index MY products can be used for the construction of a Low Index Grid. The low index grid couples the light out of the OLED array, resulting in improved light extraction.



### About MY Polymers Ltd.

Distinguished by its total focus on low refractive index materials, **MY Polymers** is a leader in this field.

**MY Polymers** has been active in the field of Low Refractive Index Optical Coatings Adhesives and Polymers since 2004. The company develops, produces, and sells primary coatings for optical fibers, recoating materials, optical adhesives, bio-photonics materials, anti-reflective coatings, and various other low index polymers, coatings and adhesives.

**MY Polymers** is ISO certified. We serve the global Photonics and Electronic Display industries, with customers in the North America, Asia and Europe.

MY Polymers Ltd. - The Low Refractive Index Company

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