

# #1 Coating Technology in The World Molecule Gradient Layer (MGL)<sup>TM</sup> Technology

UV curable double sided tape for optics with excellent shock

## MGU series

#### Construction

Optical double-sided tape based on acrylic gel.

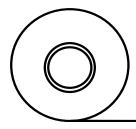
The features of may clean gel are as follows.

- (1) Excellent visible light transmittance
- (2) Excellent energy absorption

#### **Feature**

- 1. It is free of acrylic acid and reduces corrosion of ITO.
- 2. Excellent step absorbability.
- 3. Excellent durability
- 4. High transparency

#### Constitution



PET separator

Special acrylic adhesive layer

PET separator

#### Basic characteristics

product name	Thickness	SUS Adhesive force (N/25mm)		Total light transmittance	HAZE
	( μ m)	Before UV irradiation	After UV irradiation	(%)	
MGU2.5	25	7	10	>99	0.19
MGU7.5	75	7	10	>99	0.22
MGU10	100	7	10	>99	0.22
MGU17.5	175	8	11	>99	0.25
MGU25	250	9	12	>99	0.28
MGU50	500	11	16	>99	0.31
MGU100	1000	14	20	>99	0.58
MGU200	2000	21	29	>99	0.98

Backing material PET25  $\mu$  m Tensile rate 300mm/min

After bonding, the measured value after 24 hours

 $\begin{array}{lll} Tension \ angle & 180 \ degrees \\ Measurement \ temperature & 23 \ ^{\circ}C \\ Integrated \ light \ intensity & 2000 \ mJ \ / \ cm^2 \\ UV \ illuminance: & 2mW \ / \ cm^2 \end{array}$ 

Transmittance, HAZE test method Measured by bonding optical glass Transmittance is the value when the loss due to interfacial reflection is excluded by calculation.

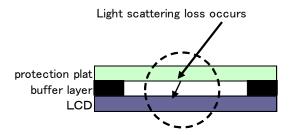
### Application Ideas

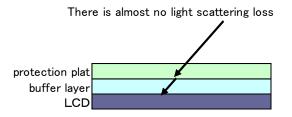
#### (1) Touch panel application

#### Visibility improvement, buffer, protection

[a buffer layer]

[a gel layer]





The refractive index of a protection plate and the refractive index of a buffer layer is different. The light which goes into a buffer layer from a protection plate decreases.

Transmission

86.9%

issue: 2022/4/21

The refractive index of a protection plate and the refractive index of a buffer layer is same.

The light which goes into a buffer layer from a protection plate does not decreases.

Transmission

92.1%

#### **Cautions**

User is responsible for determining whether the KGK product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a KGK product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a KGK product. Given the variety of factors that can affect the use and performance of a KGK product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the KGK product to determine whether it is fit for a particular purpose and suitable for the user's method of application. KGK make no warranties on above data.

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