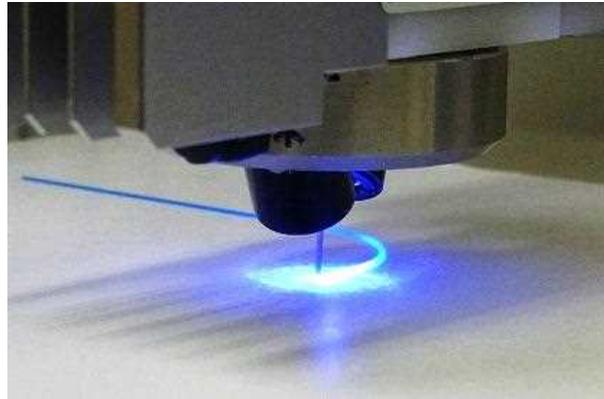


# UV curing silicone GEL

## “ for CIP (Cured-in-place) Gasket ”

**Gap correction**

**Cushioning**



**Water-proof**

**Anti-dust**

### Functions

Water-proofing, Dust-proofing, Cushioning, Vibration dampening,  
Stress relief (gap correction, backlash fixing)  
Noise reduction (chatter noise, collision noise)  
Alternative to traditional gaskets made of rubber or foamed material

### Some Applications

Precision devices, Cellphones, Digital Cameras, Camcorders, Tablet PC,  
Handy terminals and various mobile appliances.

### Features

#### 1) High designing flexibility

The GEL is cured with ultraviolet (UV) light while robotically being traced onto a part in accordance with the data electrically designed using the computer aided (CAD) system. This eliminates the conventional die-molding process and provides high flexibility in designing the gasket pattern.

#### 2) Reduction of cost and lead time

The CIP (Cured-In-Place) Gasket process reduces the cost for the die preparation and the loss generated by the manual fitting of parts. This enables one to reduce the cost as well as the lead time.

#### 3) Ease of down-sizing

The UV-curable gel can be easily processed into gaskets for various parts smaller and thinner compared with the rubber-based and form-based gasket processing. This facilitates to down-size the final products.

#### 4) Softness and low hardness

Compared with the manually fitted gasket, softer gasket with ultra-low hardness can be easily fabricated in the CIP process using the UV-curable gel.

#### 5) Short curing time

UV cure αGEL reaches its final hardness in  $100\text{-}300\text{mW/cm}^2 \times 10\text{-}30$  seconds in order to reduce production time.

# UV curing silicone GEL for CIP Gasket



## Basic specifications

		Unit	TUQ75K	TUA225K
Material			Silicone	Acrylic
Before UV Curing	Appearance		Blue	Yellow
	Initial Viscosity (1[s <sup>-1</sup> ])	Pa·s	370	200
After UV Curing	Appearance		Blue	Milky White
	Hardness (Durometer A)		10	10
	Hardness (Durometer E))		30	30
	Complex Modulus (10Hz G*)	Pa	75,000	225,000
	Loss Factor (tan δ)		0.3	0.6
	Specific Gravity	g/cm <sup>3</sup>	1.05	1.23
	low-molecular-weight siloxane	ppm	Less than 700	-
Curing Conditions	Irradiation	mW/cm <sup>2</sup>	50~200	
	Wave length	nm	280~365	
	UV Curing Amount (Conversion 365nm)	mJ/cm <sup>2</sup>	More than 2,000	
Others	Compression Ratio	%	25~50	
	Water-proof	IP	IPX5 / IPX7	
	Storage		Dark place, 1~10°C	
	Packing		Opaque syringe	



## Precautions

- \* The descriptions and the specifications are subject to change without notice.
- \* No guarantee is given to the performance of the product made by a customer using the UV-curable GEL. It is therefore highly recommended that a customer carefully carries out the adequate test for checking the suitability of using the UV-curable gel before placing the product on the market.
- \* The UV-curable GEL shall not be used in medical implant products.
- \* The UV-curable GEL contains low-molecular-weight siloxane. Silicone oil could bleed under a certain condition of use.
- \* Sunlight and fluorescent light contain UV light, so that the curing reaction of the UV-curable gel may progress when processed at a location exposed to outside light or fluorescent light. It is highly recommended therefore to avoid the UV-curable GEL being used under such external lights. Also, it is highly recommended to use the UV-cut fluorescent light.
- \* The replacement shall not be supplied except when the product is proved to be defective.
- \* Seller or manufacturer shall not be responsible for any statement or recommendation which is not described on this website except when agreed in contract signed by the administrator of seller or manufacturer.
- \* A customer shall assume liability for the import and export of Taica's products. A customer shall carefully investigate the laws and regulations of each country regarding import and export.
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