

# For the Openings and Junctions, etc. of Protective Casing for Parts.

Not containing phthalate ester which has been listed in the RoHS Directive (EU)2015/863

# **Sealants for Optical Parts**

In order to increase the long term reliability of mechanical protection, moisture prevention, etc., optical parts are housed in a protective case made by metal or plastic. Through the special features of these sealants used for the openings and junctions of protective cases, the reliability, especially moisture prevention reliability is greatly expanded.

We introduce here sealants that were developed for the purpose of preventing moisture in optical parts. If you have been unsatisfied with conventional products, please test out these materials.



- Possible Usage Examples
  - Moisture prevention sealant

for protective casing for optical parts

for electronic component parts and general electric parts, etc.

- Moisture resistant adhesives

for assembly of all types of devices

# Low Moisture Permeability

The low moisture permeability type sealant has a low moisture permeability coefficient and shuts out moisture (humidity).

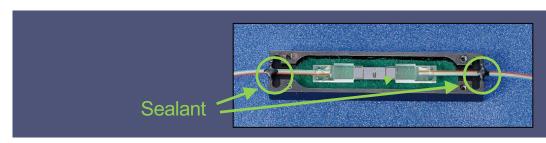
#### **Flexibility**

The high flexibility type sealant gives very little internal stress which causes transmission loss in optical fiber.

#### **Long Pot Life**

The improvement in workability in our lineup delivers a long pot life.

Structural Images



#### ■ Low Moisture Permeability Type, Properties

Item	Conditions		Units	OS5958	OS5962
Curing Conditions			-	Room temperature, 24H or 80°C, 1H	
Pot Life	r.t.		min	120	120
Moisture Permeability	85°C, 85%		cc•cm/cm²•sec•cmHg	1.6×10 <sup>-8</sup>	0.7×10 <sup>-8</sup>
Hardness	25°C		Shore D	47	66
Glass Transition Temperature (Tg)	tanδ <sub>max</sub>		°C	45	49
CTE	25 – 100°C		ppm/°C	190	100
Weight loss	100°C, 100H		wt%	0.7	-
Shear Bond Strength to SUS	Initial period			131	146
	After 121°C, 100%	10H	kgf/cm²	142	204
		20H		68	207
Pre-curing State	Solution A		-	White paste	
	Solution B			Transparent fluid (lightyellow)	
Primary Ingredient	Solution A		-	Ероху	Ероху
	Solution B			Amine	Amine
Mixing Ratio	Weight A : B		-	10 : 3	21 : 3
	Special	Features	•	Low Viscosity	High Moisture Resistance

### ■ High Flexibility Type, Properties

Item	Conditions		Units	OS5980	OS-48
Curing Conditions	-		-	80°C, 1H	r.t., 24 H or 100°C, 1H
Pot Life	r.t.		min	120	180
Moisture Permeability	85°C, 85%		cc•cm/cm²•sec•cmHg	30×10 <sup>-8</sup>	1×10 <sup>-8</sup> (75°C, 90%)
Hardness	25°C		Shore D	20	66 ( Shore A )
Glass Transition Temperature (Tg)	tanδ <sub>max</sub>		°C	-55	-46
CTE	25 – 100°C		ppm/°C	145	200
Weight loss	100°C, 100H		wt%	2.0	0.4
Shear Bond Strength to SUS	Initial period			24	11
	After 121°C, 100%	10H	kgf/cm²	44	-
		20H		50	-
Pre-curing State	Solution A			Transparent	White
	Solution B		· -	Black	Black
Primary Ingredient	Solution A			Amine	Butylene
	Solution B		· -	Modified Epoxy	Butylene
Mixing Ratio	Weight A : B		-	1:2	1:1
	Special	Features		S3903-5 RoHS confirming product	Long Pot Life Low Hardness

<sup>\*\*</sup>All company names, product names, etc., indicated herein are trademarks or registered trademarks of each respective company.

#### For more information

## http://www.ntt-at.com/product/adhesive/



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<sup>\*\*</sup>Please understand that all comments and data recorded herein may be subject to change without prior notification.

 $<sup>\</sup>ensuremath{\ensuremath{\mathbb{X}}}$  The values in the table above are not specifications.