

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).

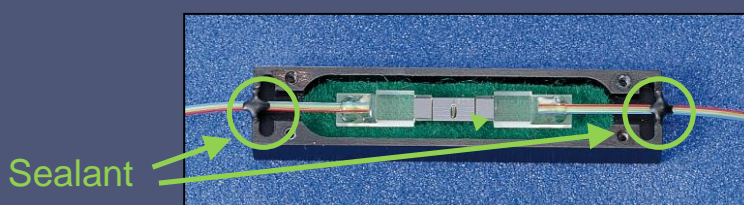
Flexibility

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



■ Specifications Low Moisture Permeability Type

Item	Conditions	Units	OS5958	OS5962
Curing Conditions	-	-	Room temperature 24 h or 80°C1h	
Pot Life	r.t.	h	2	2
Moisture Permeability	85°C85%	$\frac{cc \cdot cm}{cm^2 \cdot sec \cdot cmHg}$	1.6×10^{-8}	0.7×10^{-8}
Hardness	25°C	Shore D	47	66
Tg*	$\tan \delta_{max}$	°C	45	49
CTE	25 - 100°C	ppm/°C	190	100
Weight loss	100°C100h	wt%	0.7	-
Shear Bond Strength to SUS	Initial period		131	146
	After 121°C100%	10h	142	204
		20h	68	207
Pre-curing State	Solution A	-	White paste	
	Solution B		Transparent fluid (light yellow)	
Primary Ingredient	Solution A	-	Epoxy	Epoxy
	Solution B		Amine	Amine
Mixing Ratio	Weight A : B	-	10 : 3	21 : 3
Special Features			Low Viscosity	High Moisture Resistance

■ Specifications High Flexibility Type

Item	Conditions	Units	OS5980	OS-48
Curing Conditions	-	-	80°C1h	r.t. 24 h or 100°C1h
Pot Life	r.t.	h	2	3
Moisture Permeability	85°C85%	$\frac{cc \cdot cm}{cm^2 \cdot sec \cdot cmHg}$	3×10^{-7}	1×10^{-8} (75°C90%)
Hardness	25°C	Shore D	20	66 (Shore A)
Tg*	$\tan \delta_{max}$	°C	-55	-46
CTE	25 - 100°C	ppm/°C	145	200
Weight loss	100°C100h	wt%	2.0	0.4
Shear Bond Strength to SUS	Initial period		24	11
	After 121°C100%	10h	44	-
		20h	50	-
Pre-curing State (Paste's Color)	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 conforming product	Long Pot Life Low Hardness

※ All company names, product names, etc., indicated herein are trademarks or registered trademarks of each respective company.
 ※ Please understand that all comments and data recorded herein may be subject to change without prior notification.
 ※ Numerical values listed are measured values. They are not performance guarantees.

For more information

<http://www.ntt-at.com/product/adhesive/>



NTT Advanced Technology Corporation

Optical Products Business Unit

NTT Musashino R&D Center, 3-9-11, Midori-cho, Musashino-shi, Tokyo, 180-0012, Japan

TEL: +81 422 39 8934, FAX: +81 422 39 8935

201802A