

Polyester resin base flame retardant adhesive **SC608Z2 series**

Features

SC608Z2 series is polyester-based self-extinguishing adhesive and UL approved. With their outstanding electrical characteristics, it is the best choice for insulating seals and bonding of electric/electronic components.

- It is UL-approved product.
 - UL 94V-0 (File No.E63260) •UL 746C (File No.MH15485)
- It has superior electric non-conductance.
- It hardly deteriorates characteristics on the test of endurance general electric/electronic components.
- It has high density and superior thixotropic properties, and useful on a vertical surface.
- It has good workability with cob webbing and sagging and enables bonding works.

Structure

Item	SC608Z2	SC608LVZ2
Main component	Polyester resin base	
Color	White	
Viscosity(Pa·s)	50 to 125	7 to 10
Solid content[wt%] *2	57 to 64	50 to 54
Specific Gravity	About 1.3	About 1.2
Diluent	Toluene, MEK	
Container	180ml tube 18kg can	180ml tube 1kg or 18kg can
Storage life	6 month	

* UL94 V-0 (File No.E63260), UL746C (File No.MH15485)

*2 Temporary standard

Suitable use

- For fixing electronic devices and insulation

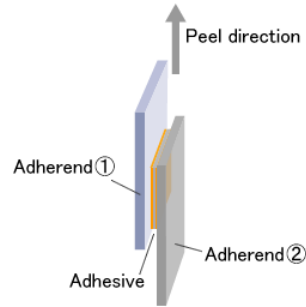


Technical data

1. Bonding strength on various type of substrate (Shear strength)

<Test piece condition>

Substrate size : 25mm × 150mm
 Adhesive thickness : about 150μm (wet)
 Open time : 5min at 30°C condition
 Bonding area : 10mm × 25mm
 Bonding condition : 0.5MPa × 3min
 After aging : 100°C × 2 hours
 Measurement condition : 23±5°C, 60±20%RH
 Peeling speed : 10mm / min



<Result>

(N/cm²)

Substrate	Shear strength
Polystyrene / Polystyrene	103.3
ABS / ABS	131.4
PMMA / PMMA	66.2
Soft vinyl chloride / Soft vinyl chloride	58.5
Hard vinyl chloride / Hard vinyl chloride	111.3
Polyester / Polyester	105.8
Polycarbonate / Polycarbonate	150.0
Phenol / Phenol	118.7
Glass-epoxy / Glass-epoxy	269.5
Zinc plate / Zinc plate	510.0
Copper plate / Copper plate	525.6
Iron plate / Iron plate	412.4
Aluminum plate / Aluminum plate	4778.6
Tin plate / Tin plate	530.7

2. Voltage endurance

<Test piece condition>

Sample size : 0.5mm thick sheet
 Initial stage : After leaving for 72 hours, dry at 100°C for 2 hours and measure.
 Measuring instrument : 875AZ type LERA CURRENT 1 manufactured by KIKUSUI Electronics Corp.
 Load current AC : The value when dielectric breakdown is not produced during voltage multiplication by 0.5 KV in 30 seconds.
 Load current DC : Multiply the voltage by 0.5 KV in 30 seconds starting from 3KV.

<Result>

Load condition	Load current	Initial value (KV)	Aging value (KV)	Aging conditions
100°C	AC	9.5	9.5	• 100°C × 500hr • 60°C90%RH × 500hr • Cycle load 10 cycle -30°C×3hr/100°C×3hr
60°C90%RH		9.5	9.5	
Cycle load		9.5	9.5	
100°C	DC	10.0 or over	10.0 or over	
60°C90%RH		10.0 or over	10.0 or over	
Cycle load		10.0 or over	10.0 or over	

3. Volume resistance

<Test piece condition>

Sample size : 0.5mm thick sheet

Measuring instrument: Yokogawa/HP type 16008A High Resistivity Cell.

<Result>

Load condition	Initial value (Ω-cm)	Aging value (Ω-cm)	Aging conditions
100°C	1.6×10^{15}	2.2×10^{15}	same above condition
60°C90%RH	1.6×10^{15}	1.3×10^{15}	
Cycie load	1.6×10^{15}	4.8×10^{15}	

4. Surface resistance

<Test piece condition>

Sample size : Each 35 μ m copper foil/grass epoxy boards into a comb-shaped electrode configuration (JIS Z3197) in 1.27mm pitch, and apply 0.2mm (wet) thick adhesive layer.

Measuring instrument : Yokogawa/HP type 4329A High Resistance Meter.

<Result>

Load condition	Initial value (Ω-cm)	Aging value (Ω-cm)	Aging conditions
100°C	2.7×10^{15}	1.1×10^{15}	same above condition
60°C90%RH	2.7×10^{15}	0.4×10^{15}	
Cycie load	2.7×10^{15}	4.8×10^{15}	

5. Impact resistance

<Test piece condition>

Circumferential bonding : Overall bonding on the circumference of the bottom of the capacitor

Partial bonding : Bonding 2 spots on the circumference of the bottom of the capacitor(bonding area = 1/2 of the circumference)

Sample size : Bond a 6.8gcapacitor on the glass epoxy board (5cm × 5cm).

Load condition : Leave it in an atmosphere (20°C, 65%RH) for 7days, and drop from a height of 1m.

<Result>

Circumferential bonding	Partial bonding
100 times test	100 times test
No capacitor drop off	No capacitor drop off

6. Corrosiveness

There is no corrosion of visual inspection on the sample that apply 0.2 mm(wet) thick adhesive layer on the polycarbonate plate which furnished with Ag plating, after 200 hours at 100 °C aging.

※ The differences SC608Z2 and SC608LVZ2 are only about viscosity and solid-content, Other characteristics are almost same and in a tolerance. Accordingly only SC608Z2 result record on this data sheet.

Caution

【Notes of storage】

- Store the product in a tightly closed container in a predetermined place at room temperature avoiding direct sunlight
Refer to the material safety data sheet (MSDS) and instruction manuals.
- Contains volatile, flammable liquid.
- Usable period is 12 months after production. Production date is recorded container.

【Notes of operation】

Check before operation

- Check the relevant MSDS and instruction manuals for precautions required for operation.
- Avoid eye and skin contact. Wear protective goggles and gloves.

Operation environment

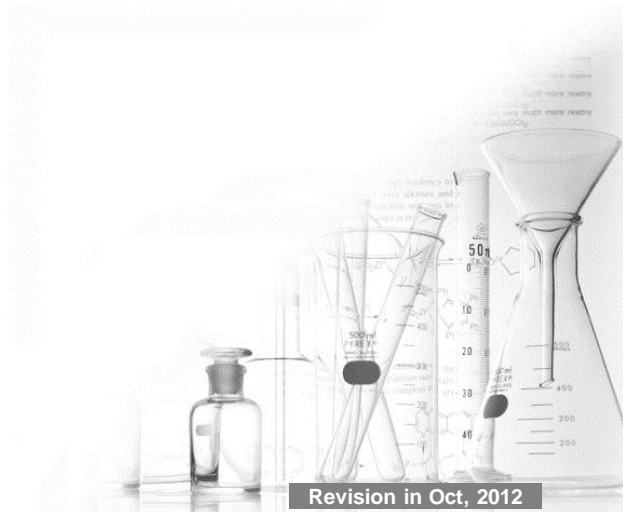
- Keep ignition sources away.
- Use a local ventilator to ensure sufficient air circulation.

First aid

- Learn action to take from the MSDS and instruction manuals.
- In case of eye contact, vapor inhalation or swallowing, seek medical attention immediately.

Prohibition of unintended use

- Never use the product except as an adhesive.



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◆ Note on the characteristic data given— Data on the characteristics of the products described in this catalog are based on the results of evaluations carried out by the company. This does not guarantee that the characteristics of the product conform with your usage environment. Before use, review the usage conditions based on evaluation data obtained from the equipment and substrates actually used.

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