Product description

ACR 2342 Series (Rigid adhesive） UV curable coating adhesive is a single component low viscosity UV curable coating adhesive, this product is UV wet double curing system, the shadow part of UV light can be wet curing. 100% solid, no solvent. Green and eco-friendly. The product has the advantages of low viscosity, can be sprayed, suitable for water curtain spraying process operation, UV curing surface fast viscosity, wet resistance, salt spray resistance, dust resistance, easy to use, safe operation and so on.

In addition, the coating protective film is also conducive to the friction resistance and solvent resistance of the lines and components, and can release the pressure caused by periodic changes in temperature. It can fully protect the wire panel in a variety of chemical corrosion, salt spray, moisture, high pollution and dust, vibration and high and low temperature and other harsh environment without affecting its work and signal.

Features:

- Modified polyurethane acrylate
- UV+Moisture curing system
- Low viscosity, suitable for brush, spray, dip coating a variety of processes
- After curing to form a certain hardness, anti-wear transparent elastic protective film
- It has good adhesion to various circuit boards
- Good resistance to high and low temperature and flame retardant performance

Application field

- Hybrid integrated circuits
- Automotive electronic control panel
- Electronic circuit boards
- Aviation instrumentation
- Flexible printed circuit boards
- Computer control panel
- Industrial control board
- Semiconductor crystal line protection
- Appliance controller
- Outdoor LED display

Technical parameters before and after curing:

Model	ACR 2342Series
Color	Fluorescent blue clear liquid
Features	PU Modify Acrylic
Curing method	UV or moisture
Viscosity (cps)	60cps, 200cps
Density (g/cm3)	1.05-1.10
Solid content (%)	100
Warranty period (months)	6
Moisture full hardening time, h (25℃ 70%RH)	72
Hardness（Shore D）400mW/cm2，20s	50-60

Curing condition

Recommended curing conditions	365nm UV-LED Surface light source	405nm UV-LED Surface light source	0.2 KW Track type mercury lamp
Light source optical power (mW/cm²)	700	700	0.2 KW

Curing time (s)	≥5	≥6	≥6
Accumulated energy(mj/cm²)	≥3500	≥4200	≥1200

Curing instructions: The curing speed varies with the intensity of the UV lamp, the distance from the light source, the spectral distribution of the light source, the exposure time, and the light transmittance of the substrate.

Electrical/mechanical properties (curing at 25℃ and 75% humidity for 7 days)

Hardness (Shore D)	80-90
Applicable temperature range (℃)	-50～+135
Dielectric strength (kv/mm) IPC-TM-650	≥16
Dielectric constant (70MHz)	2.9
Volume resistivity (Ohm·cm) IPC-TM-650	$\geq 7.99\times10^{13}$

The following data are performance tested after 7 days at room temperature

Adhesion	Hundredfold method	5B
Moisture-proof insulation properties	IPC-CC-830B	Pass
Electromigration	IPC-SM-840C	/
Electrical corrosion	IPC-CC-830B	/
High and low temperature shock	- 45-125 ℃	Pass
Hydrolytic stability	IPC-CC-830B	Pass
Salt spray test	5% NaCl solution /pH 6.5-7.2/35℃	Pass
Antifungal test	ASTM G21	Pass
Flame retardant test	UL94-V0 coating substrate test	Pass

All the above data were obtained by determination or further experimental test after 7 days of adhesive curing at 25℃, 55%RH.

Operation process

- The exposure of ambient light sources and artificial light sources should be minimized before curing.
- The gluing site should be cleared of flux residue, grease, release agent or other contaminants before gluing.
- The curing speed depends on a number of factors, including UV lamp strength, the distance of the coating from the light source, the thickness of the coating and the amount of glue in the shaded area, among others.
- The proper UV lamp must be used for curing; For the opaque shadow area, the curing effect can be achieved by moisture reaction, but the final performance of the product cannot be achieved by moisture curing alone. Actual moisture curing times may vary depending on the application. Under normal humidity conditions, the wet curing effect can be achieved in shaded areas within 7 days.
- This product is suitable for a variety of manual and automatic spraying equipment. The source air used for spraying must be dried (dry inert gas is strongly recommended) to prevent premature moisture curing of the product from affecting use. Perform the spraying process in a well-ventilated environment. Sheet size, geometry, and coating method will affect the final coating thickness.

- This product is a wet curing material, and the containers and lines during the process should be protected from moisture as much as possible.

Packing specification

- 1KG/ barrel, 5L/ barrel; 20L/ barrel
- Other packing specifications (advance notice to order required)

Storage and transportation

- Store in a dry place away from light when not in use.
- It is recommended to use up the opening of the product within one day. Reseal the container under dry inert gas (such as nitrogen) to extend the service life.
- From the date of production, products are stored in unopened original containers at 8°C to 28°C and have a shelf life of six months.

Precautions

- Do not pour the glue solution back into the original package after removal to prevent contamination of the original solution. The workplace should be well ventilated, or forced ventilated. Keep away from children for storage.
- If it gets on your skin, wash it immediately with soapy water. If it gets on your eyes, wash it with plenty of water and then seek medical attention.
- Refer to the MSDS of this product for details.

Safe Operation Information

This is not complete product safety information. Before use, please read the product information, product safety information and packaging labels for safe use. Product safety information can be obtained from MAXTECH and variousdistributors, by email to maxtech@shmaxtech.com.

Quality Guarantee - Please read it carefully

We guarantee that the information contained herein about the performance and use of the product is accurate and reliable. However, you should test the performance and safety of the product before use. The recommendations of the application should not be considered applicable in every state.

Unless MAXTECH provides a written proof that it is suitable for a particular need, MAXTECH only warrants the specifications listed in the sales prospectus for the Products and no other use. MAXTECH's sole responsibility is to provide a refund or exchange if the product does not meet the requirements listed, and MAXTECH expressly disclaims liability for accidents.