

Data number	ST-P-SPC-021
Data version	1



Product Technical Specification

Product name: Three-proof glue

Model: SK-7200EP-AB (44)

Company Name: Guangdong Jinhongtai Chemical New Materials Co., Ltd.

Factory address: Jinhongtai Industrial Park, No. 7, Development 2nd Road, Fine Chemical Industry Park, Nanxiong City, Guangdong Province

contact number: 0751-3884688

Fax: 0751-3884999

net site: <http://www.gdsunhot.com>

Data number	ST-P-SPC-021
Data version	1

Product technical specifications

1. Development background

The English name of conformal coating is Conformal Coating. It is an upgrade of traditional protective paint (moisture-proof oil) and other products. Initially, conformal coating was only used in printed circuit boards in the high-tech field. As electronic devices are more and more widely used in daily life, consumers are now paying more and more attention to the quality and reliability of products. The common coating of three-proof adhesive allows manufacturers to effectively improve product quality and reduce expensive warranty period failure costs.

In order to meet the growing demand for high-quality three-proof adhesives in the market, and at the same time solve the problem of high cost of imported three-proof adhesives, and better meet customer needs. Our company's expert team and professors from well-known universities have jointly researched and developed the Jinhongtai self-reactive three-proof adhesive SK-7200 series for many years, and introduced foreign advanced technology and materials, and developed it using special processes and formulas.

2. Product introduction

SK-7200 series of three-proof adhesive is composed of special synthetic resin as the main body and special multi-component copolymer modified polymer resin. It combines the advantages of various single insulating materials and is completely different from traditional three-proof adhesive. After this three-proof adhesive is coated on the PCB, it can be used on various printed circuit boards through the adhesive reaction between its own groups and the air medium. Generates a dense protective film with strong insulation protection capabilities.

Self-reactive conformal adhesive is coated on printed circuit boards and components, which can reduce or eliminate electronic operating performance degradation when they may be affected by adverse factors in the operating environment. PCB circuit boards that have used three-proof adhesive have the "three-proof" properties of moisture-proof, salt spray-proof, and mildew-proof, as well as resistance to cold and heat shock, aging resistance, radiation resistance, salt spray resistance, ozone corrosion resistance, and vibration resistance, thereby improving the circuit board reliability, increase its safety factor, and ensure its service life. In addition, because this three-proof adhesive can prevent leakage, it allows higher power and closer printed board spacing. This can meet the purpose of component miniaturization. It has the characteristics of quick drying, low odor, and environmental protection, which can effectively improve customer production efficiency and quality.

3. Product characteristics

- ★ Stable and temperature resistant $-40^{\circ}\text{C}\sim 125^{\circ}\text{C}$
- ★ Ultra-low water absorption, excellent moisture-proof effect
- ★ Safe and environmentally friendly, this product uses environmentally friendly materials and does not add benzene, toluene, xylene, acetone and other toxic and harmful substances, so it has extremely low odor.
- ★ The paint film has good flexibility and can effectively eliminate stress between components
- ★ Strong adhesion, can effectively prevent corrosion from salt spray, weak acid, alkali, etc.
- ★ Strong weather resistance, resistance to hot and cold shock, and can effectively protect products.

4. Scope of application

Three-proof protection of electronic control boards such as computer products, power supplies, communication products, televisions, audio equipment, household appliances, instruments and equipment, medical equipment, new energy industry, rail transit, aerospace, military industry, etc., can extend the life of circuit boards and improve usage stability.

Before Use:

5. Application Guide

- Workers should wear protective equipment, such as masks, gloves, aprons... The temperature and humidity of the production site should be controlled at: temperature $10^{\circ}\text{C}\sim 28^{\circ}\text{C}$, relative humidity
The upper limit of the degree is 85%, and it is optimal under the condition of $\leq 70\%$.
- Make sure that the container containing the three-proof adhesive is clean and dry and free of any form of contamination. If there is contamination, stop using it immediately and replace it with a new three-proof adhesive.
- This conformal paint has good coating compatibility. Under normal circumstances, there is no need to clean the coated surface before coating. But make sure the surface to be coated is dry, clean and free of

Data number	ST-P-SPC-021
Data version	1

Oil, dirt, impurities, etc. can be used to obtain the best coating effect and protective performance of the three-proof adhesive.

- 4. Maintain good ventilation equipment in the workplace to better protect the health of personnel.
- 5. Keep the three-proof plastic container tightly closed to avoid the intrusion of water vapor, etc. Please read the Product Safety Data Sheet (MSDS) before using this product.

In Use Work:

- 1. When using, try to use a sealed container to store the three-proof adhesive. Do not use a blower to blow directly into the open container containing the three-proof adhesive to avoid the three-proof adhesive from evaporating.

It is too fast and wastes material or the surface becomes white. If there is a need to pause during the operation, the container containing the three-proof glue must be sealed during the pause, and measures should be taken to prevent evaporation and dust to avoid affecting the effect when reusing.

Data number	ST-P-SPC-021
Data version	1

During the operation, ensure that the thickness of the PCB board's three-proof adhesive is uniform.

3. Keep the temperature of the oven on the production line balanced. The specific temperature depends on the temperature resistance of the components and the process requirements. The upper limit is 100° C. When it just comes out of the oven

After Use:

Do not touch in any way to prevent burns and damage to the glue coating. Wait until the surface is dry before proceeding to the next process.

1. Unused three-proof adhesive should be placed in a special collection container and should not be mixed with unused three-proof

adhesive. 2. Clean the used containers with special diluent for three-proof adhesive, wipe them dry with a dry cloth, and put them in

the designated area. 3. Take off the protective equipment, put it in the designated area, and wash your hands and face before leaving

get off work.

6. Technical Specification

Project	Product Indicator	Guideline
Material	Modified polyurethane resin	
Exterior	yellow	GB/1721
Specific gravity (25℃)	0.900 ±0.100KG/L	/
Viscosity (25℃, 4# Tu cup, seconds)	30±5	GB1723-79
Solid content (%)	44±2	GB1725-79
Halogen content (in Cl-Total, wt%)	qualified	IPC-TM-650-2007
Drying time (25℃, RH70%, natural drying)	Surface stem≤15'	GB1727-79
	Hardening ≤ 3HR, hard work ≥ 168HR	

7 . Performance Indicator

project	Product indicators	Testing methods and standards
Adhesion (cross-hatch test)	Level 0	GB/T 9286
Paint film flexibility	qualified	QJ/GD 41.13.060
Heat softening resistance	qualified	QJ/GD 41.13.060
Flammability rating	UL-94HB	UL746
Volume resistivity	≧103Ω.cm	GB 1981-89
Dielectric constant	3.5	IEC60763
Oil resistance	qualified	HG/T 3857-2006
Acid and alkali resistance	No corrosion, peeling, wrinkling, blistering, loss of gloss, etc.	5% NH4Cl, 5% Na2CO3, coating for 72h

Data number	ST-P-SPC-021
Data version	1

Vulcanizat ion test	pass	Q/JHT J 00.099-2014
Thermal shock	qualified	IPC-TM-650. 2. 6. 7. 1A
Salt spray test	96 hours to pass	ISO 9227
mold testing	qualified	GB/71741-2007

Data number	ST-P-SPC-021
Data version	1

8. Environmental requirements

The product must meetRoHS2.0,ReachandM-3-WI-QA-019All requirements of the “Material Environmental Protection Certification Specifications”,
The product shall meet all requirements of RoHS2.0, Reach and M-3-WI-QA-019 《Material Environmental Certification Specification》

illustrate:=

- 1. The above performance test is based on the condition that the paint film is completely dry;
- 2. This information is for reference only and does not serve as a basis for assuming legal liability; when using it, please customize the most suitable procedure or control method according to the process requirements to ensure the stability of quality.