



Anhui Surmount New Materials Co., Ltd.

SMT Epoxy Structural Adhesive Two Component(3:1)

Product Introduction

This product is a high modulus structural adhesive. It is primarily composed of epoxy resin, hardener, and fine aggregate, mixed with a small amount of modifiers in appropriate proportions to create a component adhesive. It is mainly used for assembling and bonding concrete components. This product series is two component, with Part A primarily consisting of cyclic resin and Part B primarily consisting of hardener.

Performance Features

- High bonding strength, high toughness, and peel resistance
- High temperature resistance and wear resistance
- Long durability

Scope of Application

- Bonding and strengthening concrete to steel plates and structural steel
- Precast segment assembly, bridge bearings, curtain wall fixtures
- Structural bonding of metal/ceramic/composite materials
- Anti vibration bonding for foundations, guide rails, and motor magnets

Usage Limitations

- Do not apply at temperatures below 5°C or above 35°C
- Do not apply when relative humidity is $\geq 85\%$ or when there is a visible water film on the substrate surface
- Not intended for areas subject to prolonged immersion or chemical exposure (acids, alkalis, salt solutions)
- Not suitable for construction in airtight spaces

Physical Properties (at 23°C, 55% RH)

Test Item	Technical Data	Test Standard
Working Time (min)	≥ 20	/
Sag Resistance	No sagging at 3mm	/
Compressive Strength MPa (1d)	≥ 25	GB/T 2567
Compressive Strength MPa (7d)	≥ 95	GB/T 2567
Concrete Compression Shear Strength MPa	≥ 14	/
Steel to Steel Shear Strength MPa	≥ 15	GB/T 7124
Non Volatile Content %	≥ 99	GB/T 2793



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Application Instructions

1. Substrate Preparation:

- Before construction, perform a compatibility test between the adhesive and the materials it will contact, as well as an adhesion test with the substrate to be bonded.
- Concrete: Age ≥ 28 days, compressive strength ≥ 25 MPa, moisture content $\leq 4\%$, surface free of dust, oil, and laitance.
- Steel: Sandblast to Sa 2.5 grade, roughness 50~75 μm , degrease thoroughly.

2. Application Method:

- Mixing: Use an electric mixer at 400-600 rpm. Mix for 3 minutes, scrape the sides of the container, then mix for another 1 minute. The mixed quantity must be used within the working time.
- Application: Use a notched trowel or spatula. Apply adhesive layer thickness of 13 mm, with a thicker layer in the middle and thinner at the edges.
- Pressing: Immediately after assembly, apply pressure ≥ 0.3 MPa for positioning and maintain for ≥ 12 hours (at 23°C).
- Curing: Optimal temperature 15-35°C, humidity $< 85\%$.

3. Precautions

- Use within the product's shelf life. Do not use expired product.
- Strictly follow the standard application procedures.
- The product releases trace amounts of chemical substances during curing. Ensure adequate ventilation in the work area. It is nontoxic after curing.
- Avoid direct contact with skin and eyes. Do not swallow.
- Keep out of reach of children.

Storage & Transportation

This product is classified as nonhazardous. Shelf life is 24 months (unopened). Store in a cool, dry place at temperatures between 5-30°C. Protect from extreme cold, direct sunlight, and rain during transportation.

Packaging

20 kg/set (Part A: 15 kg + Part B: 5 kg). Custom packaging is also available upon request.



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This instruction manual is for reference purposes only and does not carry any
warranty. Please test its suitability beforehand.