

TM-BOND[®] SG

Epoxy Bonding Adhesive for Segmental Construction



TM-BOND[®] SG thixotropic epoxy adhesive is a two pack solvent free epoxy resin system consisting of a white base, and black hardener in pre-weighed quantities for easy on-site mixing. The product is available in three grades:

TM-BOND[®] SG 5- Fast set for application between 5°C to 20°C

TM-BOND[®] SG 15- Medium fast set for application between 15°C to 30°C

TM-BOND[®] SG 25- Slow set for application between 25°C to 40°C

Uses

- For bonding segmented concrete bridge structures to speed up construction and provide a structural and water resistant joint.
- For pointing stone masonry joints to retain structural integrity.
- To seal cracks in concrete can also be used for filling up pits and blow holes in concrete.

Benefits

- Excellent squeezability
- High bond strength
- Fast cure
- Tolerant to damp surfaces
- Wide range of temperature applications

Technical Support

The company provides a technical advisory service supported by a team of specialists in the field.

Standards Compliance

TM-BOND[®] SG fully conforms to the FIP specifications for segmental bonding adhesives.

Properties

Colour	Base	White
	Hardener	Black
	Mixed	Grey
Mixed Density at 25°C	1.75-1.80	

Cure Characteristic	Recommended Application Temperature	Pot Life** (Mins.)	Open Time (Mins.)
TM-BOND [®] SG 5	5°C-20°C	30 @ 20°C	60 @ 20°C
TM-BOND [®] SG 15	15°C-30°C	30 @ 30°C	60 @ 30°C
TM-BOND [®] SG 25	25°C-40°C	30 @ 40°C	60 @ 40°C

** for 100 g of mixed material.

Mechanical Properties

Squeezability (FIP 5.4)	Meets the requirement	
Compressive Strength (FIP 5.6)	@ 24 hours	>50 N/mm ²
	@ 7 days	>75 N/mm ²
Tensile Bonding Strength (FIP 5.14)	Concrete Failure	
Shear Strength (FIP 5.15)	13 N/mm ²	

Instructions for use

Surface Preparation

Concrete should be mechanically sound and free from contamination, such as free water, mould, oil or grease, laitance and dust. Grit blasting is recommended. Sections to be bonded should be checked for good alignment. A 'dry run' before the first application of the adhesive is recommended to ensure correct timing.

Mixing

The base and hardener shall be emptied into a suitable container and mixed with a paddle and slow speed heavy duty drill, ensuring the sides are scraped down. A uniform grey colour should be obtained after mixing thoroughly.

Application

The mixed adhesive is applied to both surfaces to be bonded with a serrated trowel or other suitable spreader like putty blade. The joint should be closed immediately, if this is not achieved the surface of the adhesive should be slightly scratched immediately prior to closing the joint to expose fresh adhesive. The joint must be closed within the open time of the adhesive. On site monitoring of the operation using lapped asbestos cement panels is recommended.

Cleaning of Application Equipment

Tools and equipment should be cleaned immediately after use with Cleaning Solution.

Health and Safety Instructions

Some people are sensitive to epoxy resin system and may develop dermatitis. Direct contact with eyes will cause irritation and may cause serious damage if left untreated. Any eye contamination should be washed thoroughly with water and immediate medical attention should be sought. Gloves, barrier creams and eye protection should always be used when handling TM-BOND[®] SG and Cleaning Solution.

If contact with skin occurs, a resin removing cream should be used, followed by washing with soap and water. Solvent shall not be used.

Fire

TM-BOND[®] SG base and hardener are nonflammable. Cleaning Sol is flammable. Do not use near naked flames. No smoking.

Flash Points

TM-BOND[®] SG Base 100°C (Abel open cup)
TM-BOND[®] SG Hardener 100°C (Abel open cup)
Cleaning Sol Solvent 33°C (Abel closed cup method IP 33)

Storage

At least 12 months if stored below 35°C in unopened containers.

Packing

3.7 ltr standard packs.

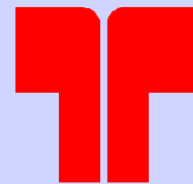
Coverage

Approximately 2 ltr/m² at 2 mm thickness

Other Segments:

- Concrete Admixtures • Surface Treatments • Grouts & Anchors • Repair & Rehabilitation
- Protective Coatings • Industrial Flooring • Waterproofing • Sealants • Adhesives

Disclaimer: The information contained in this document is true and accurate to the best of our knowledge and is based on our experience & test results. It is always the Company's endeavor to give true and accurate information however as it does not have any direct and/or continuing control on the use of the Products, the Company cannot accept any liability, direct or indirect as a consequence of the use of Products. In the event of any doubt upon any critical parameter it is advisable to seek clarification from our technical representative.



THERMAX

Thermax Limited
Environment House, Plot No.90-92
BG Block, MIDC, Bhosari,
Pune 411 026, India.
Tel: +91-20-67156000
Fax: +91-20-27120206
Customer Care: 18002090115 (India
toll free)
Email : enquiry@thermaxglobal.com

Ahmedabad

Tel: +91-79-26575408 • Fax: +91-79-65577270

Bengaluru

Tel: +91-80-22371721 • Fax: +91-80-22371726

Chennai

Tel: +91-44-24303400 • Fax: +91-44-24353841

Delhi

Tel: +91-11-46087200 • Fax: +91-11-26145311

Hyderabad

Tel: +91-40-23253700 • Fax: +91-40-23253799

Kolkata

Tel: +91-33-66070800 • Fax: +91-33-66070999

Mumbai

Tel: +91-22-67542222 • Fax: +91-22-22040859

Thermax World-wide

UK, USA, UAE, Germany, Belgium, Denmark,
Russia, Saudi Arabia, Thailand, Malaysia,
Bangladesh, Sri Lanka, China, Philippines,
Peru, Chile, Kenya, Nigeria, Brazil, Indonesia

Website: www.thermaxglobal.com

Thermax Business Portfolio

Chemicals

Absorption Cooling

Air Pollution Control

Boilers & Heaters

Power

Water & Waste Solutions

Solar