# CIKObond DS-SEG(TP)



## High-Performance, Thixotropic, Aggregate filled Multipurpose Epoxy adhesive

#### **Description**

CIKObond DS-SEG (TP) is two components thixotropic epoxy-based adhesive for bonding similar and dissimilar materials such as concrete precast items, segmental concrete items, stones, wood, waterproofing tapes, steel and many more subjected to high loads. It provides excellent adhesion to several types of substrates.

CIKObond DS-SEG (TP) is a blend of premium quality epoxy resin cured with a special grade of hardener and reinforced with proper fillers and graded aggregates. It offers excellent adhesion to almost any type of materials.

## **Properties & Advantages**

- Two component epoxy based thixotropic structural adhesive.
- Easy to mix and apply
- Exhibits excellent bond strength, no creep.
- Moisture tolerant can be applied to slightly damp surface free of standing water.
- Suitable for wide range of applications and long open time even at high temperatures.
- Exhibits good squeezing properties suitable for effective spreading and contact.

## **Application Area & Uses**

CIKObond DS-SEG (TP) as a is suitable for both industrial and commercial segments such as

- Bonding precast elements.
- Bonding external steel reinforcement plates for strengthening beams, slabs and columns.
- Repair of precast concrete units.
- Dowel bar anchoring, fixing cat's eye and road studs on asphalt pavements.
- Fixing and filling precast stairs.
- Filling gaps in concrete structures.
- Fixing and adhering waterproofing flexible tapes.

**Physical Properties** 

Physical Properties	
Form	Thixotropic paste
Colour	Standard light grey
Mixed Density (Kg/L)	1.5 ± 0.05
Mixing Ratio by weight (A:B)	100:25
Gel time ASTM C881	≥120 minutes
Final Cure	7 days @ 37°C
	10 days @ 25°C
Standalone Non sag vertical thickness	Max. 10 mm
VOC (USEPA 24)	<30g/L
Compressive Strength ASTM C579	≥25 N/mm² (1day)
	≥30 N/mm² (3days)
	≥45 N/mm² (7 days)
Flexural Strength of adhered concrete beams ASTM C78	100% Fractured concrete
Deflection Temperature/Heat of deflection	0.001 mm @ 37°C
ASTM D648	0.25 mm @ 51°C
Tensile Bond Strength to Concrete	100% Fractured concrete
Slant shear Bond Strength ASTM C882	>9 N/mm² @ 2 days
	>15 N/mm² @ 14 days
Modulus of Elasticity ASTM C469	≥ 22 GPA
Water Absorption ASTM D570	< 0.15%



## Coverage

A 6 kg kit of CIKObond DS-SEG (TP) will provide coverage of 2 m<sup>2</sup> at 2 mm thickness. Note: Coverage rates given are theoretical. Due to wastage and the variety or/and nature of substrates, practical coverage figures may be reduced, this will vary with site and application conditions

## **Application instructions** Surface preparation

The substrate surface should be free from dust and loose particles. All contamination should be treated well before the application of CIKObond DS-SEG (TP). For, specific plastics and polymer-based substrates, use CIKOsol or CIKO MEK solvent for surface for treat and degrease it.

#### Mixing

The base [Part-A] and hardener [Part-B] components of CIKObond DS-SEG (TP) should be mixed thoroughly using a Heavy-duty slow speed drill paddle assembly for 2 - 3 minutes to achieve a homogenous colour mix.

#### **Application**

Properly mixed materials should be spread or filled over the cleaned surface using notched trowel or a suitable tool. The two items shall be pressed firmly/squeezed together within the open time of the adhesive depending on prevailing ambient temperature and the version used. Excess of materials shall be removed. A mechanical support is required especially for bonding metal plates. For precast bonding, the surfaces must be brought into contact as soon as possible within the open and gel time of material. The compression must be kept sufficiently at the required strength.

#### **Packaging**

CIKObond DS-SEG (TP) is packed in 6.0 kg (4L) consisting of Part A & B.

#### Shelf life

CIKObond DS-SEG (TP) has a shelf life of 12 month if stored in unopened cans and in accordance with the mentioned conditions.

#### Storage

CIKObond DS-SEG (TP) should be stored in its original packaging under enclosed shaded area away from direct sunlight, rain and moisture at temperatures between 5 -25°C.

#### **Precautions**

CIKObond DS-SEG (TP) should not be applied at temperatures below 10°C and shall not be diluted with any solvent.

## **Health & safety**

CIKObond DS-SEG (TP) should not come in contact with eves or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Applicator should wear appropriate clothes, gloves and goggles. Use of barrier cream is recommended to provide additional skin protection. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

## **Technical Support**

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

## More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- **Ancillaries**

**Legal Notice and Warranty** 

Legal Notice and Warranty

CIRO warrants this product to be free from manufacturing defects and to meet the technical properties stated in the current Technical Data Sheet, if used as directed within its shelf life. Satisfactory results depend not only on quality of product but also on many factors beyond our control. CIKO makes no other warranty or guarantee, express or implied, including warranties of merchantability or fitness for a particular purpose with respect to its product. The sole and exclusive remedy of purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of CIKO. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims onto presented within that period are waived by purchaser. CIKO will not be responsible for any special incidental, consequential including lost profits or punitive damages of any kind. Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on CIKO's present knowledge and experience. However, CIKO assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. CIKO reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified expert.

TDS/AB22 Rev.:2 Issue:C

All CIKO products are manufactured under a strict management system conforming to and in compliance with requirements of international standards of Quality, Environmental, occupational Health and Safety ISO 9001, ISO14001 and ISO45001.









