Carbolink's Solutions for :

Grouts & Anchors

Grouts & Anchors Product Specifications & Technical Data Sheets(TDS)

India's Most Preferred
Construction Chemical Manufacturing Brand

Carbolink India Pvt. Ltd.

WWW.CARBOLINKINDIA.COM

Carbolink India Pvt. Ltd.
COMPANY PROFILE

For years, Carbolink India has been the Quality Leader in offering excellent Construction Chemical Products with Supreme Quality and Reliability.

Carbolink India Manufactures Industrial Flooring(Epoxy & PU Flooring), Decorative Flooring, 3D Flooring, Waterproofing Systems, corrosion protection, wood coatings, etc. which cater specifically to the Indian climate.With manufacturing facility in India, Carbolink India manufactures and supply Materials all through the country. Carbolink's commitment to customer service and technical support is the best. We work closely with architects, structural engineers, contractors and owners to best understand their requirements. Together we develop a best solution for a construction project, adding value and becoming more than just a materials supplier, but a solution provider.

With the support of our multinational manufacturing group, Carbolink India today has support centers across the country, strategically placed to provide consistent high standards of product and service.

Our Product Range:

- Anti Corrosive Coatings
- Car Park Flooring
- Curing Coumpounds
- Decorative Flooring
- Floor Hardner
- Grounts & Anchors

- Industrial Flooring
- Reparing Compunds
- Sealants
- Sports Flooring
- Tiling Products
- Wood Coatings

Grouts & Anchors

Cement and Epoxy resin grouts for construction applications including grouting baseplates, machine bases, rails and all sorts of voids in new construction and repair work.

With exceptional flow, stability and strength characteristics, our grouts provide the best solution for high precision and critical applications, together with a wide range of cement and resin based anchoring systems. The range of grouts and anchors is tested and outperforms industry laid norms and standards.

Utilizing our extensive range of products, combined with the expert knowledge and experience of our people, Carbolink strives to deliver an innovative and value-driven solution. Always in constant consultation with our customers, Carbolink will develop a tailored solution for any construction project, adding value and becoming more than just a materials supplier.

Carbolink manufactures a full range of world class Grouts & Anchors systems providing the most up-to-date technologies. Carbolink India is a leader in tailored Grouts & Anchors Solutions.

Here is our Grouts & Anchors Products range:

C 10

Mould Release Emulsion

FEATURES
Water based, environmentally friendly
It reduces damage
Suitable for all types of shutters and moulds
Fast working progress
Stain free
Easy application

DESCRIPTION
C 10 is specially designed for the release of hardened concrete from the mould and shutters. It forms a thin water repellent layer on the surface of the formwork and prevents the concrete from adhering. C 10 is water based, environmentally friendly and technically superior to typically found oil based products. The reactive components in C 10 protect the formwork and ensure an even colour and texture in the cast concrete.

SURFACE PREPARATION
The surface to be treated should be clean, free from other contaminations substances prior to the application. Used moulds must be thoroughly clean and free from old mortar residues, dust, cement stains.

APPLICATION AND MIXING
C 10 should be stirred well before use.
Dilute 1 part of C 10 with 4 parts of water, apply by using brush or conventional sprayer. If oil sprayer is used, It is important that a fine nozzle be fitted, as this should be applied in thin film and get the best results. Remove the excess material by sponge or cloth, Otherwise the surface retardation of the concrete will occur.

PROPERTIES
The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

PHYSICAL PROPERTIES

C 10	**@ 27 ± 1ºC**
Appearance	Light brown liquid
Specific Gravity	1.00 - 1.03 gram/cc
pH	7 - 8

COVERAGE ESTIMATES

Pack size	**Coverage**
5 Litres	Approximately
20 Litres	80 - 130 m²/litre
200 Litres	when diluted with 1 : 4 water

STORAGE AND SHELF LIFE
C 10 has a shelf life of 12 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS
In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE
Spillage of any of the C 10 product should be removed with plenty of water. Disposal of such product or empty packaging should be in accordance with local waste disposal authority regulations.

CONDITIONS OF SALE
Sold subject to the Company's conditions of sale which are available on request.

NOTE
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C 20

Concrete Curing Compound

FEATURES
Single component
Minimises the crack surface
Ease of curing the fresh concrete, UV exposed concrete / mortar surface
Reflects UV rays
Provides good curing efficiency
Toxic free and biodegradable

DESCRIPTION
C 20 is a liquid emulsion, which when used on fresh concrete / mortar surface, seals the concrete surface temporarily and prevents rapid moisture evaporation from the concrete. It forms a thin layer for the complete curing period and improves the durability of the concrete. Suitable for all construction applications and highly beneficial for malls, flyovers, bridges, airports, dams, etc., or anywhere where water curing may be difficult.

STANDARDS
Curing efficiency : C 20 Curing Compound
Tested as per BS 7542 - 1992 standard.

SURFACE PREPARATION
The surface to be treated with C 20 should be clean, sound, free from oil, grease, laitance, dust and other barrier materials.

Use a suitable degreaser to remove polish, wax, grease, oil and similar contaminating substances prior to the application of C 20.

APPLICATION AND MIXING
C 20 should be shaken well before use.
Use brush or spray gun for the application of C 20 on the new UV exposed concrete / mortar surface. While spraying, maintain the uniform thickness to achieve the rate of coverage. Thick application may reduce the coverage and it may be difficult for removed by mechanical means.

LIMITATIONS
This product should not be applied in temperature less than 10 ºC. Keep in airtight container to prevent surface evaporation. Entire concrete surface should be treated with C 20 to avoid evaporation.

PROPERTIES
The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

PHYSICAL PROPERTIES

C 20	@ 27 ± 1ºC
Appearance	White liquid emulsion
Specific Gravity	0.98 - 1.02 gram/cc
pH	9 - 10

COVERAGE ESTIMATES

Pack size	Coverage
5 Litres	Approximately
20 Litres	6m² /litre /coat
200 Litres	

Note : The coverage figure is based on a flat level surface, additional material should be allowed for where the surface is rough or uneven.

STORAGE AND SHELF LIFE
C 20 has a shelf life of 12 months if kept in a dry condition. Store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS
In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE
Spillage of any of the C 20 product should be removed with plenty of water. Disposal of such product or empty packaging should be in accordance with local waste disposal authority regulations.

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E 135

Admixture and Polymer Bonding Agent (SBR)

FEATURES
High performance polymer additive for cement and concrete mixes
Water resistant - used as a temporary waterproofing barrier on rooftops
High strength - ideal for patching, can be feathered out to repair minimal cracks and also for use in coving areas
Non-toxic - does not create occupational health & safety concerns

DESCRIPTION
E 135 is an SBR, multipurpose, concentrated, liquid polymer additive which when used with sand/cement, greatly improves the bond strength and flexibility. Being water resistant, E 135 mixed with cement can be used as a water resistant barrier coat. It can also be used as an admix for renders / screeds creating high bond strength and flexibility. E 135 can be applied to damp surfaces (Saturated Surface Dry no standing water) and can be rendered or painted over.

SURFACE PREPARATION
The surface to be treated should be clean, sound, free from oil, grease, laitance, dust and other barrier materials.

Use a suitable degreser to remove polish, wax, grease, oil and similar contamination substances prior to the mortar application. New concrete should be allowed to cure for at least 28 days.

MIXING
Temporary Waterproofing
1 part Polymer bonding agent : 2 parts cement, (by volume).

Admix for render / screed / coving: Mix 1 Part Polymer bonding agent with 3 parts water and use as the gauging mix (mixing water) with a 3 : 1 or 4 : 1 sand / cement mix.

Binder coat : 1 part E 135 : 1 part water : 4 parts cement (by volume).

APPLICATION
Temporary Waterproof
E 135 with fine cement to a lump free consistency. Pre - moisten the concrete then apply a first coat using a brush or roller to achieve 1mm wet bed thickness. Allow first coat to set, then apply second coat at right angles to the first application to ensure no pinholing occurs.

Slurry Coat
Mix to a thin binder and spread the mix overthe surface with brush or roller, or small broom. Maximum thickness recommended is 2 mm. While the binder coat is still wet, apply render or screed over it.

Render/Coving
Apply binder coat on the prepared surface. While the binder coat is wet apply the Polymer bonding agent mortar mix with a wood float trowel, ensuring firm pressure on the trowel to work the render into good contact with the surface.

Screed
A minimum thickness of 15mm is recommended when using diluted Polymer bonding agent instead of water. For a thickness greater than 40mm, reinforcing mesh is required.

Using a roller, brush or a flat trowel, coat the prepared area with a binder coat of Polymer bonding agent to improve adhesion to the substrate.

Apply the screed mix whilst the binder coat is still wet using a straight edge, trowel or timber batten to level the screed.

Achieve falls in shower recesses to a minimum 1 : 60 : internal wet areas (eg bathrooms) to a minimum of 1 : 80 : and external areas to a minimum of 1 : 100.
Screeds should be left with a wood float finish to create a key for tiling and waterproofing. When reinforcing the screed with mesh, apply first layer of screed, lay in the mesh and apply the second layer of the screed. Do not lay the mesh directly onto the substrate.

DRYING TIME
Approximately 16 hours (overnight) at 23ºC and 50% relative humidity when used for water resistant or render / screed.

PROPERTIES
The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

PHYSICAL PROPERTIES

E 135	@ 27 ± 1ºC
Appearance	White colour liquid
Specific Gravity	1.02 - 1.03 gram/cc
pH	8 - 10

PACK SIZE
1 Litre, 5 Litres and 20 Litres.

STORAGE AND SHELF LIFE
E 135 has a shelf life of 12 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS
In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE
Spillage of any of the C 20 product should be removed with plenty of water. Disposal of such product or empty packaging should be in accordance with local waste disposal authority regulations.

CONDITIONS OF SALE
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EP 300

Epoxy Bonding Agent

FEATURES
Excellent bond strength
Non-Shrink
Forms a structural bond between new and old concrete
Can be applied to damp surfaces
Compatible with fresh cement or concrete products
Excellent adhesion to most substrates

DESCRIPTION
EP 300 is an un-pigmented two component, phenalkamine epoxy bonding agent. It is specifically designed for bonding new render or concrete to aged or old concrete substrates. It acts as a high strength bonding bridge between old and new concrete. EP 300 is a good bonding agent for tiles, bricks, concrete blocks, repairing potholes and spalled concrete etc.

SURFACE PREPARATION
EP 300 is an un-pigmented two component, phenalkamine epoxy bonding agent. It is specifically designed for bonding new render or concrete to aged or old concrete substrates. It acts as a high strength bonding bridge between old and new concrete.

EP 300 is a good bonding agent for tiles, bricks, concrete blocks, repairing potholes and spalled concrete etc.

MIXING & APPLICATION
Individual contents of EP 300 should be thoroughly stirred before being mixed together. The entire content of the Part A should be poured into a larger mixing vessel to incorporate the Part B. Finally the part B is added to the same vessel. Mix all the two materials with spiral mixing paddle in a slow speed drill, continue until a consistant homogenous mix is achieved. One or more packs can be mixed simultaneously to ensure a quick rate of installation.

The mixed material should be applied to the prepared surface without delay using a brush. Only apply the Bonding Bridge to an area to which the new render or concrete can be placed while the bonding bridge remains tacky state. Immediately following application of the EP 300, place the new render or concrete and finish as required. Repeat the process until the full area to be treated is complete.

LIMITATIONS
EP 300 should be applied whilst the surface temperature is between 10º - 35ºC. The product will cease to cure below 10ºC, but will recommence curing when the temperature rises above 10ºC. Curing time will also be adversely affected in situations where relative humidity is > 85%.Good ventilation should be provided during curing cycle.

CLEANING
EP 300 can be removed from tools and equipment by using CLI RTC 100 immediately after use. Any hardened material will need to be removed mechanically.

PROPERTIES
The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

PHYSICAL PROPERTIES

EP 300	@ 27 ± 1ºC
Appearance	Off white colour, with brushable consistency
Pot life	4 - 5 hours
Mixed density	1.35 - 1.40 g/cc
Initial cure	48 hours
Full cure	7 days
Time between the coats	24 hours
Bond Strength After 1 day	>2.0 N/mm^2

Compressive strength After 7 days BS 6319-Part-2	76.0 N/mm^2
Flexural strength BS 6319-Part-3	50.0 N/mm^2
Tensile strength BS 6319-Part-7	> 13.0 N/mm^2
Shear strength Test BS 6319-Part-4	> 5.0 N/mm^2

COVERAGE ESTIMATES

Pack Size	Coverage
5kg Part A 4kg Part B 1kg	Approximately 10m²/kit

NOTE : The coverage figure is based on a flat level surface, additional material should be allowed for where the surface is rough or uneven.

STORAGE AND SHELF LIFE

EP 300 has a shelf life of 12 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL/SPILLAGE

Spillage of any of the accelerating admixer product should be removed with plenty of water. Disposal of such product or empty packaging should be in accordance with local waste disposal authority regulations.

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EP 310
Polyester Resin Anchoring Grout

FEATURES
Shrink-free
Excellent strength
Vibration resistance
Resistance to heavy loads
Corrosion resistance
Easy to apply

DESCRIPTION
EP 310 is a specialist anchoring grout which combines, outstanding durability and anchoring properties. This anchoring grout is stronger than the concrete. It is used for anchoring reinforcing bars, dowels, holding down bolts as well bedding, jointing and re-profiling concrete. It can be used where the hole and bar diameter is less than or equal to 25mm and also used to repair larger voids-where fast strength gain is important.

SURFACE PREPARATION
The substrate must be hard, sound and free of dust and other barrier materials such as paint, lime coatings, plaster, curing agents, laitance, adhesive residues etc., which will inhibit adhesion to the substrate.

Use a suitable degreaser to remove polish, wax, grease, oil and similar contaminating substances prior to the application of EP 310.
NOTE: Any joints or cracks in the substrate where differential movement is anticipated e.g. movement joints, should be brought through to the finished surface.

MIXING
The individual contents of the EP 310 should be thoroughly stirred before being mixed together. The entire contents of the Part A should be poured in to a larger mixing vessel to incorporate the Part B. Mix thoroughly for one minute using forced action. Ensure smooth mixing. Finally the Part B is added to the same container. The mixing of all the two should continue for further two minutes to create consistent homogenous mix.

APPLICATION
The mixed material should be poured to the prepared substrate without delay. Bar should be fix into the hole immediately after the grout is poured, slight twisting action is required for full contact of grout to bar for maximum bonding.

NOTE: Do not overwork the surface and do not mix more than can be used within the working time. The work area should be protected during the installation process and during the initial curing time to ensure that no airborne debris can contaminate the surface of the wet resin as this will lead to unwanted blemishes in the hardened, and cured surface. All movement joints in the substrate must be carried through the EP 310 and properly sealed.

LIMITATIONS
EP 310 should only be applied at temperatures above 10 ^{0}C. Substrates should be dry and not affected by rising damp. Concrete or other cementitious substrates should have a surface tensile strength of at least 1.5 N/mm^{2}.

EP 310 may be applied to substrates of a lower strength, but the long-term performance may be impaired. Once the mixed material has exceeded its pot life, the viscosity and the characteristics of the product will change and any unused product should be discarded.

CLEANING
EP 310 can be removed from tools and equipment by using CLI N18 immediately after use. Any hardened material will need to be removed mechanically.

PROPERTIES
The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

PHYSICAL PROPERTIES

EP 310	@ 27 ± 1ºC
Pot life	50 minutes
Mixed material density	1.85 - 1.90 gram/cc
Full cure	7 days

Compressive Strength
BS 6319-Part-2

8 Hours	> 40 N/mm²
1 day	> 55 N/mm²
7 day	> 75 N/mm²

PACK SIZE
1kg & 4kg

1kg	4kg
Part A : 250g	Part A : 1kg
Part B : 750g	Part B : 3kg

YIELD
Allowance should be made for wastage when estimating quantities required.
The approximate yield per 4.0kg pack is

Consistency	Pourable
Yileld	2 litres

NOTE: These figures are theoretical, due to the wastages and the variety and nature of substrates practical coverage figures may be reduced.

STORAGE AND SHELF LIFE
EP 310 has a shelf life of 6 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS
During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and by using, if necessary, a suitable barrier cream.

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE
Spillage of any of the component products should be absorbed onto sand or other inert materials and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

CONDITIONS OF SALE
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EP 320

Solvent-free, Low Viscosity Epoxy Resin for Crack Injection

FEATURES
Excellent bond strength
High elastic modulus ensures effective transfer of stresses at bond interface
Pre proportioned to give consistent performance
Due to its low viscosity grouting can be done to air line cracks
Resistant to a wide range of chemicals and liquids

DESCRIPTION
EP 320 is a two-component, epoxy resin based crack injection system, designed for sealing cracks in concrete. It is recommended for grouting of 0.10 mm to 10 mm wide cracks, cold joints and other such undesirable cracks.

SUBSTRATE PREPARATION
The concrete surface must be hard, sound and free of dust and other barrier materials such as paint, lime coatings, plaster, curing agents, laitance, adhesive residues, etc., 2 - 3 cm on either side of the crack that will inhibit adhesion to the substrate.

Use appropriate pneumatic drills for making suitable holes and fix the nipples or injection packers. Ensure the holes are free from debris and laitance before fixing the packers or nipples.

Use suitable adhesive for fixing surface port or nipples in position. The distance of ports or the nipples depends on the crack severity and the nature of the structure but with maximum centre-to-centre distance of 800 mm. Close the whole length of crack opening using suitable adhesive.

MIXING
The individual component of EP 320 should be thoroughly stirred before being mixed together. The entire content of Part A should be poured into a large vessel so that the Part B can be accommodated. Mix the two component thoroughly to ensure a smooth and consistent mix is achieved.

APPLICATION
The mixed EP 320 is injected / grouted into cracks / joints using the suitable equipment.

The suitable equipment shall be a low pressure, air operated injection equipment or hand operated cartridge gun or a syringe depending on the location and size of the crack. Grout / inject in each port or nipple that are fixed earlier to the application.

Inject in each port or nipple (keeping all others closed except the next immediate one). When the EP 320 start coming out of the next port / nipple, close it and continue injection / grouting until the pressure is maintained for 1 - 5 minutes.

Close the port, disconnect the pump and continue this process until all the ports / nipples are injected / grouted similarly.

After 24 hours remove all the nipples / ports and fill the resulting cavity with suitable epoxy adhesive.

LIMITATIONS
Once the mixed material has exceeded its pot life the viscosity and the characteristics of the product changes and any unused product should be discarded at this time.

CLEANING
EP 320 can be removed from tools and equipment by using CLI N 18 immediately after use. Any hardened material will need to be removed mechanically.

PROPERTIES
The values shown are typical of results obtained in the laboratory at 27 ± 1ºC. Actual performance values obtained on site may vary from those quoted.

PHYSICAL PROPERTIES

EP 320	@ 27 ± 1ºC
Appearance	Pale yellow liquid
Mixed Density	1. 05 - 1.15gm/cc
Viscosity	250 ± 50 cps
Pot Life	45 Minutes
Application limits	0.1 mm - 10 mm
Tack free time	6 Hours

Compressive Strength (ASTM C579)

24 hours	>55 N/mm²
7 days	>60 N/mm²
Shrinkage, ASTM C881	Passes
Full Chemical Cure	7 days

COVERAGE ESTIMATES

Pack size	Coverage
1kg	The coverage
Part A 750g	depends on the
Part B 250g	substrate, width of the crack / void to be grouted, loss and
4kg	
Part A 3kg	waste and porosity of
Part B 1kg	the substrate

STORAGE AND SHELF LIFE
EP 320 has a shelf life of 12 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS
During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and by using, if necessary, a suitable barrier cream.

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE
Spillage of any of the component products should be absorbed onto sand or other inert materials and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

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EP 325

Solvent-free, High Viscous Epoxy Resin for Crack Injection System

FEATURES
Excellent bond strength restores structural integrity
High elastic modulus ensures effective transfer of stresses at bond interface
Pre proportioned to give consistent performance
Moisture-insensitive versatile in applications
Resistant to a wide range of chemicals and liquids

DESCRIPTION
EP 325 is a two-component, moisture - insensitive, epoxy resin based crack injection system, designed for sealing cracks in concrete and restoring its structural integrity. It is recommended for grouting of 0.5 mm to 10 mm wide cracks, cold joints and other such undesirable cracks.

SUBSTRATE PREPARATION
EP 325 treated surface must be hard, sound and free of dust and other barrier materials such as paint, lime coatings, plaster, curing agents, laitance, adhesive residues, etc., 2 - 3cm on either side of the crack that will inhibit adhesion to the substrate.

Use appropriate pneumatic drills for making suitable holes and fix the nipples or injection packers. Ensure the holes are free from debris and laitance before fixing the packers or nipples.

Use suitable adhesive for fixing surface port or nipples in position. The distance of ports or the nipples depends on the crack severity and the nature of the structure but with maximum centre-to-centre distance of 1000 mm. Close the whole length of crack opening using suitable adhesive.

MIXING
The individual component of EP 325 should be throughly stirred before being mixed together. The entire content of resin Part A should be poured into a large vessel so that the hardener Part B can be accommodated. Mix the two component throughly to ensure a smooth and consistent mix is achieved.

APPLICATION
The mixed EP 325 is injected / grouted into cracks / joints using the suitable equipment.

Use a high pressure, airless double diaphragm pump or two-component piston pump specially design for epoxy injection. Inject in each port or nipple (keeping all others closed except the next immediate one). When the resin start coming out of the next port / nipple, close it and continue injection / grouting until the pressure is maintained for 1 - 5 minutes.

Close the port, disconnect the pump and continue this process until all the ports / nipples are injected / grouted similarly.

After 24 hours remove all the nipples / ports and fill the resulting cavity with suitable epoxy adhesive.

LIMITATIONS
Once the mixed material has exceeded its pot life the viscosity and the characteristics of the product changes and any unused product should be discarded at this time.

CLEANING
Clean tools and equipment using CLI Ecos Sol 205 immediately after use.

PHYSICAL PROPERTIES

EP 325	@ 27±1ºC
Appearance	Pale yellow liquid
Mix density	1.1 kg/litre
Viscosity	1000±100 cps
Pot Life	45 Minutes
Application limits	0.5 mm - 10 mm
Tack free time	6 Hours
Full Chemical Cure	7 days

Compressive Strength (ASTM C579)

24 Hours	>60 N/mm²
7 days	>70 N/mm²

Bond strength to concrete (ASTM D4541)

7 days	>2.0 N/mm²

COVERAGE ESTIMATES

Pack size	Coverage
5 kg	The coverage depends
Part A 4.10kg	on the substrate, width
Part B 900gms	of the crack / void to be grouted, absorption of the substrate, loss and waste and porosity of the substrate

STORAGE AND SHELF LIFE

EP 325 has a shelf life of 12 months if kept in a dry, store between 5ºC and 30ºC in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

PRECAUTIONS

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to epoxide materials. Always wear gloves and eye/face protection is necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE

Spillage of any of the component products should be absorbed onto sand or other inert materials and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

CONDITIONS OF SALE

Sold subject to the Company's conditions of sale which are available on request.

NOTE

The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

India's Most Trusted
Construction Chemical Manufacturing Brand

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