

Product Information Bulletin

2008

CENTROX™ L (Aqueous Solution)

Surface Hardening, Restoration & Corrosion Protection

DESCRIPTION

Centrox™ L is a chemically blended aqueous solution, free of chlorides, especially formulated to significantly enhance the surface hardness of old and new concrete (hardening and hardened) by surface application.

Centrox™ L is also a strong Penetrative Corrosion Inhibitor which prevents steel reinforcement corrosion.

USES

- As a performance and durability enhancer of existing concrete structures **Centrox™ L**:
 - Densifies and hardens the surface layer.
 - Increases impermeability, chemical resistance and durability.
 - Restores the protective properties of the concrete against reinforcement corrosion.
- On new hardening concrete, **Centrox™ L**:
 - Reduces water loss by about 20%.
 - Promotes efficient cement hydration.
 - Reduces surface cracking.
 - Increases surface hardness, impermeability and durability.
 - Enhances concrete protective properties against steel reinforcement corrosion.
- As a primer for most cementitious renders, **Centrox™ L** increases the adhesive bond strength of the render.
- As a hardener and durability enhancer of brickwork joints.

AREAS OF USE

- Restoration of degraded concrete structures (approved for use on Heritage sites).
- Dust proofing of factory floors.
- Surface hardening and abrasion resistance of concrete surfaces i.e. floors, roadworks, bridge decks etc.
- Reinstatement of poorly finished concrete.
- Primer for cementitious render.
- Water retention agent for new hardening concrete.

INSTALLATION (Refer MSDS before applying)

Surface preparation: **Centrox™ L** must be applied to a clean surface free of contaminants. Pressure washing is recommended as minimum preparation.

Application: **Centrox™ L** is a ready to use product which can be applied by spray, brush, mop or broom. Apply to clean, dry or damp surface.

Application rate: Depends on the absorbency of the surface but usually in the range of 3 – 5 square metres per litre.

Curing time: Not applicable, treated concrete can be put into service as soon as the surface is dry.

PROPERTIES OF TREATED CONCRETE

Friction abrasion resistance – Russian Federation Standard 13087 (Analogue of DIN 52108)

Mass loss is reduced by up to 40 times.

Impact abrasion resistance

AS/NZS 4456.9-2003

The abrasion resistance is increased.

Chloride Ion Diffusion

NT Build 443 1995 – 11

Reduced approximately two times.

Reinforcement corrosion inhibition

Polarisation curves method

Steel reinforcement is passivated and hence corrosion is inhibited.

Water absorption

Taywood Engineering Test

Absorption is decreased by approximately 20%.

Water retention for new hardening concrete

AS 3799 – 1998

Water loss is reduced by approximately 20%.

Slippery resistance

AS/NZS 4586 – 2004

Unchanged by treatment.

ADDITIONAL INFORMATION

Centrox™ L is normally applied as a single coat but if double coating is deemed necessary for badly degraded concrete the second coat can be applied after 2 to 4 hours, when the first coat is fully impregnated into the concrete.