


ElastoSmart IWL Special

 A cutting-edge and redefined liquid integral waterproofing compound, specially formulated with Poly Carboxylate Ether.

DESCRIPTION

Strizelo ElastoSmart IWL Special is a top-tier integral waterproofing compound formulated with Poly Carboxylate Ether (PCE) meticulously crafted for incorporation into cement-based mortars and concrete. When seamlessly blended with cement-based mortars and concrete, the high-performance solution goes beyond the ordinary and gracefully envelops cement and aggregates, dispersing particles with finesse and mitigating capillary action, ultimately crafting a dense and resilient concrete structure. This innovative solution effectively diminishes concrete permeability, thereby elevating the waterproofing capabilities to higher levels. Strizelo ElastoSmart IWL SPECIAL being engineered with a unique blend of polymers ensures compatibility with a diverse range of cements and binders, including fly ash, silica fume, metakaolin, ground granulated slag, and more.

Key Uses

- Versatile Application:** Strizelo ElastoSmart IWL SPECIAL represents a ground breaking solution applicable in a wide range of concrete and mortar scenarios, spanning residential, commercial, and infrastructural projects. Its efficacy extends across diverse applications, ensuring optimal performance in various concrete and mortar settings.
- Water-Resistant Features:** Suited for construction projects exposed to water consistently or intermittently, such as sea walls, tunnels, basements, and exposed superstructures, Strizelo ElastoSmart IWL SPECIAL excels in providing reliable water resistance.
- Optimized Performance:** Achieve maximum effectiveness by combining Strizelo ElastoSmart IWL SPECIAL with other durability enhancing admixtures, ensuring superior waterproofing in concrete structures.
- Structural Fortification:** When applied to structural and pre-cast concrete in exposed superstructures, Strizelo ElastoSmart IWL SPECIAL guarantees a fortified foundation that withstands the test of time.
- Dual-Action Marvel:** Experience the combined advantages of waterproofing and superior water reduction in cement concrete, mortars, and plasters, from the innovative formulation of Strizelo ElastoSmart IWL SPECIAL.

Benefits

- Ease of Use:** Strizelo ElastoSmart IWL SPECIAL is a liquid, simple to use.
- High Performance concrete:** The fourth generation PCE molecule ensures the production of high-performance concrete, particularly suitable for structural applications.
- Cost Effective Solution:** Considering its low dosage requirement, this solution proves to be economical, making it an efficient choice for various construction projects.
- Enhanced Workability:** As a water-reducing admixture, Strizelo ElastoSmart IWL SPECIAL enhances workability, cohesion, pumpability, and minimizes segregation, streamlining the construction process.
- Superior Surface Finish:** The application of this admixture contributes to an enhanced surface finish, adding a professional touch to the final product.
- Strength Redefined:** The incorporation of this technology results in concrete with superior compressive strengths, ensuring structural integrity.

- Excellent Waterproofing:** Strizelo ElastoSmart IWL SPECIAL guards against water intrusion with the waterproofing capabilities of this admixture. Whether facing hydrostatic pressure or capillary absorption, it offers reliable resistance.
- Durability Unleashed:** By reducing the permeability of concrete, this admixture significantly improves the structure's durability, ultimately extending the lifespan of the construction.

Application Versatility

- Basements:** Ideal for constructing robust and durable basement structures.
- Roof Slabs and Screeds:** Ensures high-performance and longevity for roof applications.
- Water Retaining structures:** Safeguards against water-related challenges in projects involving water containment.
- Bathrooms:** Enhance the longevity and water resistance of bathroom structures, ensuring enduring quality.
- External plastering:** Enhances the quality and durability of external plaster with smooth finish.

Product Specifications

Chemical Base	Poly carboxylate ether (PCE)
Aspect	Light Brown liquid
Specific gravity	1.05 ± 0.02 at 25°C
pH	>6
Chloride ion content	<0.2%
Water Reduction capacity	15-20%
Reduction in permeability to water, IS: 2654 – 2003	<30% of control mortar specimen
Workability	Improves workability at reduced water cement ratio
Setting Time	No significant effect on setting time of concrete or mortar.
Compressive Strength at 3 days, as per IS: 2645 – 2003	>95% of control mortar specimen
Compressive Strength at 7 days, as per IS: 2645 – 2003	>95% of control mortar specimen

Test Certification/Approvals

IS:2645-2003 • IS: 9103-1999 • ASTM C494: Types A & D

Guidelines For Dosage

1. Recommended Dosage Range:

- Use 200–400 ml of Strizelo ElastoSmart IWL SPECIAL for every 50 kg bag of cement.
- Optimal Results: Determine the optimum dosage through trial mixes tailored to your specific project requirement.

2. Variable Dosages:

- Adjust dosages based on specific material combinations and conditions.
- Higher dosages might be necessary for water reduction exceeding 15%.

3. Trial Mixes Importance:

- Conduct trial mixes to ascertain the ideal Strizelo ElastoSmart IWL SPECIAL dosage.
- Variations in concrete materials and job site conditions may necessitate dosages beyond the recommended range.

4. Application Process:

- Convenient Liquid Form: Strizelo ElastoSmart IWL SPECIAL comes in a ready-to-use liquid form.
- Mixing Procedure: Dispense the admixture into the concrete along with the mixing water.
- Timing Matters: Achieve maximum plasticizing effect and water reduction by adding Strizelo ElastoSmart IWL SPECIAL to damp concrete after 70 to 80% of the mixing water is incorporated.

5. Cautionary Notes:

- Avoid Dry Application: It is not recommended to add Strizelo ElastoSmart IWL SPECIAL to directly to dry aggregate or cement.

6. Tailored Support:

- Industry Expertise: Given the variability in concrete materials and job site conditions, dosages outside the recommended range may be required.
- Connect with C3S: For personalized guidance and additional information, reach out to your local C3S representative.

7. Specialized Concrete Mixtures:

- Explore Possibilities: Strizelo ElastoSmart IWL SPECIAL is versatile and can be used to develop concrete mixes with special performance characteristics.
- Consultation: For in-depth insights into its application in unique projects, consult your local C3S representative.

Tips for Producing Durable Waterproof Concrete

- 1. Optimal Water-to-Cement Ratio:** Maintain a water-to-cement (w/c) ratio within the range of 0.4 to 0.50 for effective waterproofing.
- 2. Minimize Water Content:** Keep the water content as low as possible to enhance the concrete's resistance to water penetration.
- 3. Swift and Effective Placement and thorough Compaction:** Place the concrete quickly and ensure thorough compaction to achieve a dense and impermeable structure.
- 4. Complete Curing process:** Ensure comprehensive curing using the ponding method. Proper curing is essential for the development of strength and durability in the concrete structure.

Overdosage Effects

Strizelo ElastoSmart IWL SPECIAL excess of dosage in concrete can extend initial and final set times, disrupt air entrainment, cause mix bleeding and segregation, and escalate the risk of plastic shrinkage.

Compatibility Assurance:

Strizelo ElastoSmart IWL SPECIAL has a great compatibility with a wide array of Portland cements and other concrete admixtures for elevating the production of high quality and durable concrete. This includes not only normal admixtures but also other mid-range and high-range water-reducing agents, air entrainers, accelerators, retarders, extended set-control admixtures, corrosion inhibitors, and shrinkage reducers. Notably, Strizelo ElastoSmart IWL SPECIAL also harmonizes effortlessly with slag and pozzolans, including fly ash and silica fume.

Corrosion Safeguard – Chloride Free And Non-Corrosive:

With Strizelo ElastoSmart IWL SPECIAL supports corrosion concerns. Strizelo ElastoSmart IWL SPECIAL stands as a fortress against corrosion, guaranteeing the preservation of reinforcing steel in concrete, prestressed concrete, or structures on galvanized steel floor and roof systems. Free from calcium chloride and any chloride-based components, the manufacture of Strizelo ElastoSmart IWL SPECIAL adheres to the highest standards. Embrace confidence as this admixture aligns with the most rigorous chloride ion limits recommended by prevailing construction industry standards and practices.

Optimal Workability:

Strizelo ElastoSmart IWL SPECIAL guarantees extended workability, exceeding 60 minutes at +25°C. The duration of workability is influenced by temperature, cement type, aggregate characteristics, transportation methods, and initial workability. This advanced solution minimizes workability loss, providing flexibility and ease in concrete applications.

Packaging Options:

Strizelo ElastoSmart IWL SPECIAL is conveniently available in various sizes, including 1-liter, 5-liter, 20-liter, and 245 KG drums, as well as bulk packaging options. Our commitment to convenience ensures that you have the right quantity at your fingertips, ready to elevate your concrete endeavours.

Extended Shelf Life:

The product boasts of an impressive 18-month shelf life from the manufacturing date when stored in unopened containers. To maintain product integrity, storage temperatures should be maintained between 5°C and 45°C. In case of failure to adhere to these storage recommendations may lead to premature product or deterioration of the packaging. Kindly consult with your local C3S representative for tailored storage guidance.

Safe Handling Guidelines For Chemical Products:

When dealing with chemical products, it is crucial to exercise caution both during usage and storage. It is important to take deliberate measures during both usage and storage to prevent any inadvertent contact with eyes, mouth, skin, or even food items, as they may inadvertently absorb vapours until the product is thoroughly cured or dried. In case of splashes on the eyes or skin, take immediate action to prevent further damage. If accidentally ingested, seek immediate medical attention. Ensure these products are kept out of reach of children and animals. After using the product, remember to reseal the containers, and never repurpose them for storing consumable items.

Legal Disclaimer:

The information provided, including recommendations regarding the application and utilization of Strizelo's products is offered in utmost good faith based on Strizelo's current knowledge and experience with the products. This advice assumes proper storage, handling, and application under standard conditions as per Strizelo's guidelines. In practical application, variations in materials, substrates, and on-site circumstances are inevitable. Consequently, no warranty concerning the merchantability or fitness for a specific purpose can be implied from this information. Furthermore, no liability arising from any legal relationship can be derived from this information, written recommendations, or any other advice provided.

It is imperative for the product user ser to conduct thorough testing to ascertain the product's suitability for the intended application and purpose as it is the user's responsibility to do so. Strizelo retains the right to modify its product properties, and users must respect the proprietary rights of third parties. All orders are accepted on the condition of adherence to our current terms of sale and delivery. Users are advised to consult the most recent edition of the local Product Data Sheet for the relevant product, available upon request.