

Unichem Chemicals & Asphalt W.L.L. is state of the art manufacturing unit formed in the year 2003 an ISO 9001:2008 certified company, licensed by the Ministry of Industry and Commerce in the Kingdom of Bahrain, which is specialized in production and sale of Modified Bitumen, High Performance Construction Chemicals and Industrial Resins.

UNICHEM is dedicated to providing the finest in product development, evaluation, testing and independent laboratory certification for products used in the fields of construction chemicals and bitumen emulsion.

UNICHEM is fully accredited factory with all the facilities like fully equipped Research and Development Laboratory, State of The Art Manufacturing Plant and Highly Skilled and Experienced Professionals. The team is committed to provide efficient solutions for customers backed by reliable after-sales support.

Our Vision

With a steadfast vision to excel and go beyond the expectations of our competitors and esteemed clients, we at UNICHEM believe in our capability to churn maximum growth opportunities in Middle East as well as in the Global Market. Our vision remains to reach the pinnacles of success, globally by never compromising on quality production, ensuring a clear path towards our Goals. We maintain our standards by developing the needful, via our well-equipped laboratory in our premises itself.

Our Construction Chemicals Division

The division offers a wide range of products to be applied for concrete modifications, Waterproofing, Roofing and Paving, Repair and Rehabilitation of Structures.

The product ranges from;

1. Concrete Admixtures
2. Elastomeric Waterproofing Paints
3. Cementitious, Epoxy and PU Flooring
4. Cementitious and Epoxy Mortar
5. Cementitious and Epoxy Grouts
6. Polysulphide, PU, Epoxy and Acrylic Sealant
7. Cementitious and Epoxy Tile Fixing Adhesive
8. Cementitious and Epoxy Tile Joint Fillers

Due to our specialization in the field and experienced professionals, we are capable to provide customers with the technical advice upon their requirement if necessary. We are manufacturing and distributing our products in G.C.C. countries.

Today, having been well established in the market, we have begun our plans to expand our production facility and reach out to all concerned parties in this field of growing industry and therefore, we introduce our company to you among other first-class users of this product hoping that it will be good use to you. At last, we will be more than pleased to reply to any of enquires in this regard.



HIGH PERFORMANCE
CONSTRUCTION CHEMICALS
AND MODIFIED BITUMINOUS PRODUCTS

5. UNIPLAST LMP – Liquid Mortar Plasticizer

UNIPLAST LMP is special blend of polymers, surface active agents and reactive chemicals, which is used as an admixture for cement concrete, mortar and plasters. It has plasticizing action along with crystal formation to block the pores in cement-based products. Due to this it acts as an integral waterproofing agent, making the cement concrete and plasters water tight.

Advantages

Better dispersion of cement particles and increased cohesion minimize segregation and bleeding gives improved surface finish.

It retains the breathing efficiency of concrete and plasters.

Reduces the permeability.

Increases durability by improving integral waterproofing of concrete.

Economical admixture as consumption is very low.

It improves the plasticity and reduces the shrinkage crack development in concrete and plasters.

Chloride free: Safe in reinforced concrete.

Standards

UNIPLAST LMP meets the requirement of **BS 4887 and IS: 2645-2003** standard.

Dosage: UNIPLAST LMP is dosed 100 ml per 50 kgs bag of cement. In case of additional dosage, consult to technical department.

Packaging: UNIPLAST LMP is supplied in 1 Ltrs, 20 Ltrs & in 200 Ltrs Drum.

B. MISCELLANEOUS

6. UNI – FORMPRO S 1 – Chemical Mould Release Oil

UNI - Formpro S 1 is a specially formulated blend of paraffinic mineral oils and chemicals having release properties which are superior to those of a conventional mould oil. UNI - Formpro S 1 is supplied as a pale, straw, coloured, liquid ready for direct application. The alkali reactive chemicals promote a water repellent interface which protects both steel and timber formwork whilst ensuring an even colour and texture in the cast concrete.

Advantages

Ensures good fair-faced concrete, without stains; Can be used on all types of formwork; Inhibits corrosion of steel form work; Acts as bond breaker; Cuts clean-up time; Easy to use; Keeps the forms clean.

Coating: It can be applied by brush, sponge or mould oil sprayer. If a mould oil sprayer is used care should be taken to ensure that the correct nozzle size is chosen. UNI - Formpro S 1 should be applied in one continuous even film.

Coverage: 20 to 60 m²/lit depends upon surface conditions.

Packaging: UNI - Formpro S 1 is supplied in 210 litres drums and in bulk.

C. BONDING AGENTS/ADHESIVES

7. UNI – SBR 40 – Multipurpose Latex

UNI - SBR 40 is modified styrene butadiene latex emulsion and is used to improve the water and chemical resistance of cementitious systems and to improve adhesion and strength of all types of commonly used mortars. CHEMI – X SBR 40 is resistant to hydrolysis thus can be used for outdoor application.

USES

UNI SBR 40 used for modifying and improving bonding of floor toppings, mortars, concrete and brickwork.

UNI SBR 40 used for Strengthening cold joints between old and new concrete and making them non-permeable.

UNI SBR 40 used for Fixing ceramic tiles, floor screening and mosaic tiling.

UNI SBR 40 is recommended to use for inside as well as outside applications and for sunken areas, toilets, bathrooms etc.

UNI SBR 40 is used in preparing tiling mortars for thick bed applications.

UNI SBR 40 used as primer for cementitious self levelling system after diluting with water

Standards: UNI - SBR 40 meets the performance requirements of ASTM C – 1059-99 - Standard specification for latex agents for bonding fresh to hardened concrete, Type II.

Packaging: 500 g; 1 kg; 5 kg; 10 kg; 20 kg



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A. CONCRETE & MORTAR ADMIXTURE

1. UNIPLAST 20 – Concrete Superplasticizer, High Range Water Reducing & Set Retarding Admixture

UNIPLAST 20 is based on a blend of polymers. It is a brown liquid instantly dispersible in water. UNIPLAST 20 will give flowable concrete or high strength concrete with extended workability.

Advantages

Increased workability: Reduces placing time, labour and equipment.

High strength concrete: Water reduction gives higher strengths without cement increase or workability loss.

Extended workability: Some set retardation gives longer working times which are useful for truck transport and for avoiding cold joints between concrete pours.

Reduced permeability: Reduction of water reduces porosity giving improved water impermeability.

Surface finish: Better dispersion of cement particles and increased cohesion minimizes segregation and bleeding and gives improved surface finish.

Improved pumpability: Line friction is reduced by increasing workability and cohesion.

Chloride free: Safe in reinforced concrete.

Standards

UNIPLAST 20 complies with BS EN 934-2:2012, BS 5075, ASTM C-494 Type G & D & ASTM C1017.

As a guide the dosage is normally: 0.60 – 2.0 % Volume by weight of cement. For flowing concrete 1.6 - 2.0 litres/100 kg cement for high strength concrete.

Packaging: 210 Ltrs drum or in bulk

2. UNIPLAST 15 – Water Reducing & Retarding Admixture

UNIPLAST 15 is a chloride free, plasticising admixture based on lignosulfonate. It is supplied as a brown solution which is instantly dispersible in water. UNIPLAST 15 produces more cohesive workable concrete at constant water: cement ratio with slightly improved strength or can give higher strengths at the same workability at the same water: cement ratio.

USES

UNIPLAST 15 can provide pumpable concrete.

UNIPLAST 15 provides excellent workability even at low water/cement ratio.

UNIPLAST 15 produce high strength, high grade concrete by substantial reduction in water resulting in low permeability and high early strength.

Chloride free: Safe in reinforced concrete

Standards: UNIPLAST 15 complies with BS EN 934-2:2012, BS 5075 and ASTM C-494 Type A & F/ ASTM C-494 M.

As a guide the dosage is normally: 0.80 - 1.80 litres/100 kg cement for flowing concrete. 1.3 -2.50 litres/100 kg cement for high strength concrete.

Packaging: 210 Ltrs drum or in bulk

3. UNIPLAST R 1 – Plasticizing & Set Retarding Admixture

UNIPLAST R 1 is supplied as a brown chloride free liquid which instantly disperses in water. The retarding properties of UNIPLAST R 1 are beneficial in concrete where high cement content or high temperatures are involved, cold joints in continuous concrete pours are avoided and the use of lower cement content mixes will reduce heat of hydration.

USES

UNIPLAST R 1 is a plasticizing retarding admixture which is used to increase the workability and or strength of concrete of a given cement content to improve its initial and final setting.

UNIPLAST R 1 is particularly suitable for cohesive and cement rich mixes.

Advantages

Set retardation allows extra placing time for larger pours or at elevated temperatures.

Increased workability facilitates placing and compaction.

High strengths without increase in cement content or reduction in workability.

Standards

UNIPLAST R 1 complies with BS EN 934-2:2012, BS 5075 Part 1 and with ASTM C-494 Type D.

Dosage: The dosage of UNIPLAST R 1 normally varies between 0.4 to 1.5 liters per 100 kg cement, depending on the retardation required.

Packaging: 200 Ltrs Drum or in Bulk

4. UNIPLAST PCE 12000 - High Performance Concrete Superplasticiser Based On Modified Polycarboxylic Polyether's

UNIPLAST PCE 12000 has been primarily developed for applications in the ready mixed and precast concrete industries where the highest durability and performance is required. Super plasticizing action of UNIPLAST PCE 12000 is different than conventional super plasticizers based on sulfonated melamine and naphthalene formaldehyde condensate, which create electrostatic repulsion of particles. UNIPLAST PCE 12000 initially create the same electrostatic repulsion and further stabilizes the mixes due to static repulsion of long lateral chains linked to the polymer backbone. It is designed to improve the rheology of precast concrete & makes mix very flowable at low water cement ratios.

Advantages

During mixing and placement

High workability without segregation or bleeding; Self-compacting concrete. Generally, no vibration required; Can be placed and compacted in congested reinforcement; Reduced labor requirement; Improved surface finish; Chloride free.

Effect on hardened concrete properties

Increased early and ultimate compressive strengths; Increased flexural strength; Higher E modulus; Improved adhesion to reinforcing and stressing steel; Better resistance to carbonation; Lower permeability; Better resistance to aggressive atmospheric conditions Reduced shrinkage and creep; Increased durability.

Standards

UNIPLAST PCE 12000 is free from chlorides and complies with: **ASTM C 494 Types A, E and F and BS EN 934-2:2012**

Dosage: The normal dosage for UNIPLAST PCE 12000 is between 0.5 and 2 litres per 100 kg of (cementitious material). Dosages outside this range are permissible subject to trial mixes.

Packaging: UNIPLAST PCE 12000 is supplied in 210 litres drums and in bulk.

