



ADMIXTURE

PRODUCT BROCHURE

**DUCON CONSTRUCTION
CHEMICALS INDUSTRIES LTD.**





Welcome to **Our Business !**

Ducon Construction chemicals Industries Ltd manufacturing and supplying Concrete Admixtures, Concrete waterproofing, Epoxy & Polyurethane Resin Floor Coating, Construction chemicals in Bangladesh. We are using German technology, raw materials, formulation and machinery for ensuring best quality. We have our own R&D and Q&C lab for continuous improving quality. Quality products and quality application, both are important for our sector. So we maintain Ducon Training Center for Best application ever. We trained our distributor, applicator and contractor in Bangladesh. Ensuring Best quality products, best service, best application, Easy delivery process with best price company in Bangladesh is our motto.

We offer performance construction chemicals range including admixtures, grouts & anchors, repair mortars, bonding agents, adhesives, flooring coatings, curing and sealing compounds, dry shake hardeners, joint fillers, sealants, densifiers, Concrete waterproofing, repair, 3D epoxy flooring and PU floor coating and other products used in residential, commercial and industrial applications.

We invest in the continue research and development necessary to bring you some of the most innovative products on the market. Constantly we strive to excellence on the few parameters through innovation on our products. We believe continuous development is the key to success.

Our expert application technology provides support where extraordinary results are required. New Construction related Chemicals ideas enter our world of cement and resinous material every day. We make a good relationship with scientist and researcher globally, our team of chemists are continually developing and testing innovative and environmentally friendly products for the construction chemicals industries.



**ADMIXTURE
FOR ALL TYPES OF
CONCRETE**

choose yours

DUCONMIX WPR 700

Water-reducing and waterproofing concrete Admixture

DESCRIPTION

DUCONMIX WPR 700 is liquid admixture, allow superior workability in concrete with reduced water and also achieve high resistance to water ingress. It is based on a specially formulated polymers and compatible with all types of cement and binders (like fly ash, ground granulated slag, silica fume, metakaolin, etc.)

USAGES

DUCONMIX WPR 700 is used in all types of concrete and mortar that is used in all types of residential, commercial and infrastructural construction. Also, it can be used in sea walls, tunnels, basements, structural, barrage, plaster mortar, top slab and pre-cast concrete in exposed superstructures.

APPROVALS

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

PERFORMANCE

Aspect	Dark Brown Liquid
Specific Gravity	1.065 ± 0.02 at 25 °C
pH	≥6
Chloride ion Content	<0.2%
Surface Absorption of Water, BS 1881 – Part 122	50% Lower than Control

BENEFITS

- Low dosage required
- Water-reducing
- Work ability
- Pump ability
- Reduces segregation.
- Improved surface finish.
- Improved compressive strengths
- Resistance to water penetration
- Increased durability.

DOSAGES

For a 50kg bag of cementitious material, 150g to 250g DUCONMIX WPR 700 is recommended.



DUCONMIX RSP 600

Retarding Superplasticising concrete Admixture

DESCRIPTION

DUCONMIX RSP 600 is composed of artificial polymers specially designed to inform Rheoplastic qualities to concrete and delay the set time up to 2 hours.

USAGES

DUCONMIX RSP 600 is used for ready mix concrete to increasing setting time, long hauls, pumped concrete, containing granulated slag/pozzolans, mass concrete pours, hot weather concreting etc.

APPROVALS

- ASTM C-494 Type B, D & G
- EN 934-2: T11.1/11.2
- IS 9103

PERFORMANCE

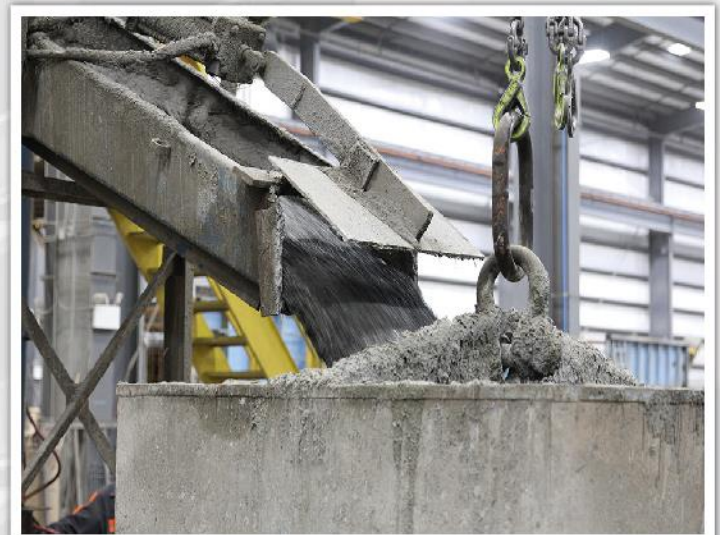
Aspect	Dark brown free flowing liquid
Relative Density	1.22±0.02 at 25° C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- High workability for longer periods
- Lower pumping pressure
- Reduced permeability
- Reduced thermal peaks
- Extended setting with longer workability
- Reduced water content
- Reduced shrinkage and creep
- Increased ease in finishing concrete
- Provides lower in-place cost

DOSAGES

Dosage range of 200g to 620g per 50kg of cementitious material is recommended as a initial point.



DUCONMIX ESP 100

High range water reducing superplasticising of rheoplastic concrete Admixtre

DESCRIPTION

The basic components of DUCONMIX RBS 100 are synthetic polymers which allow mixing water to be reduced considerably and concrete strength to be enhanced significantly, particularly at early ages. DUCONMIX RBS 100 is a chloride free product.

USAGES

DUCONMIX RBS 100 is used for small and medium project concrete to increase workability, superplasticity, Precast concrete, Low water/cement ratio concrete, in complicated formwork or with congested reinforcement and where high range water reducing is needed.



APPROVALS

- EN 934-2 Tables 3.1 and 3.2
- ASTM C-494 Types A and F
- BS 5075 Part 1 & 3

PERFORMANCE

Color	Dark Brown Liquid
Specific Gravity	1.210 at 25°C
Chloride Content	"Chloride -Free" to EN 934
Freezing Point	0°C

BENEFITS

- Flowable concrete
- Low water / cement ratio
- Strength booster
- Higher strength with same workability
- High early strength
- No change of set time
- Reduce water significantly
- Improve reoplastic elasticity

DOSAGES

Normally dispensed at a rate of 400g to 750g per 50kg of cementitious materials.



DU-BLOCKMIX

High Range water-reducing superplasticising early strength precast block Admixture based on PCE

DESCRIPTION

DU-BLOCKMIX is an economical admixture based on modified polycarboxylic ether. It is a new generation admixture polycarboxylic ether polymer with high early strength gains for precast block concrete. DU-BLOCKMIX is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Precast concrete
- Capable for self-compaction
- Block concrete
- Reduce curing time
- Early strength gain
- Smooth finishing
- Concreting in cold weather
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

APPROVALS

- ASTM C-494 Type A & F
- EN 934-2: T3.1/3.2
- IS 9103: 1999

PERFORMANCE

Aspect	Light BrownLiquid
Specific Gravity	1.0 8 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- Low water cement ratio
- Obtain high early strengths
- Eliminate heat curing
- Improve surface appearance
- Rheoplastic & Rheodynamic concrete producing
- Optimize curing cycles by reducing curing time
- Increase productivity / reduction in cycle time
- Produce durable precast concrete elements
- Improved engineering properties
- Early & ultimate compressive and flexural strengths
- Reduced shrinkage and low permeability

DOSAGES

300g to 750g DU-BLOCKMIX per 50kg of cementitious material is normally recommended.



DU-STRENGTH

High Range water-reducing superplasticising early strength Concrete Admixture based on PCE

DESCRIPTION

DU-STRENGTH is an economical admixture based on modified polycarboxylic ether. It is a new generation admixture polycarboxylic ether polymer with high early strength gains for concrete. DU-STRENGTH is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Precast concrete
- Capable for self-compaction
- Block concrete
- Reduce curing time
- Early strength gain
- Smooth finishing
- Concreting in cold weather
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

PERFORMANCE

Aspect	Light BrownLiquid
Specific Gravity	1.08 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- Low water cement ratio
- Obtain high early strengths
- Eliminate heat curing
- Improve surface appearance
- Rheoplastic & Rheodynamic concrete producing
- Optimize curing cycles by reducing curing time
- Increase productivity / reduction in cycle time
- Produce durable precast concrete elements
- Improved engineering properties and plasticity
- Early & ultimate compressive and flexural strengths
- Reduced shrinkage and low permeability

DOSAGES

350g to 750g DU-STRENGTH per 50kg of cementitious material is normally recommended.

APPROVALS

- ASTM C-494 Type A & F
- EN 934-2: T3.1/3.2
- IS 9103: 1999



DUCONMIX RSP PCE 800

Retarding Superplasticiser for Ready-Mix Concrete Admixture based on PCE

DESCRIPTION

DUCONMIX RSP PCE 800 is an economical admixture based on modified polycarboxylic ether. It's specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation. The product has been primarily developed for applications in ready mix and site-batched concrete. DUCONMIX RSP PCE 800 is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Long-distance transporting
- Pumped concrete
- Ready mixed concrete
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

APPROVALS

- ASTM C-494 Type B, D & G
- EN 934-2: T3.1/3.2
- IS 9103 DA

PERFORMANCE

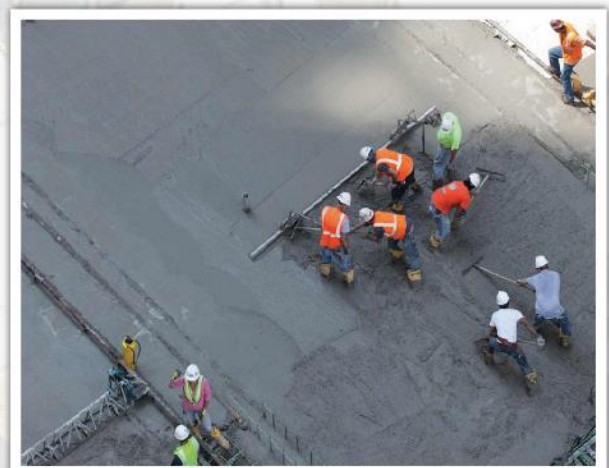
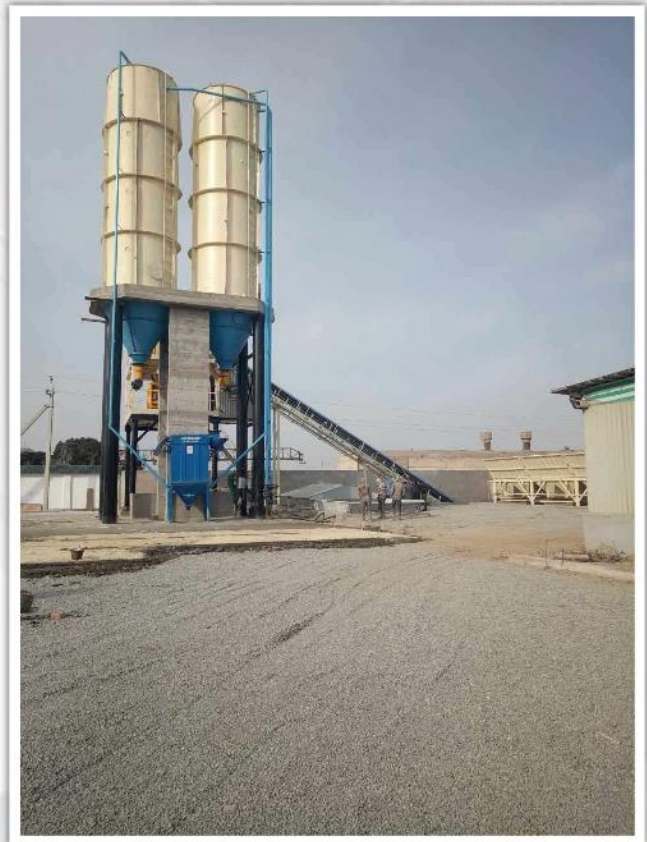
Aspect	Light BrownLiquid
Specific Gravity	1.0 8 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- High workability for longer periods
- Lower pumping pressure
- Higher ultimate strengths
- Good dispersion even in mixes with high fines
- Resistance to segregation even at high workability
- Longer workability with extended setting
- Reduced water content for a given workability
- Increased ease in finishing concrete

DOSAGES

Dosage range of 200g to 600g per 50kg of cementitious material is normally recommended.



DUCONMIX RSP PCE 830

Retarding Superplasticiser for Ready-Mix Concrete Admixture based on PCE

DESCRIPTION

DUCONMIX RSP PCE 830 is an economical admixture based on modified polycarboxylic ether. It's specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation. The product has been primarily developed for applications in ready mix and site-batched concrete. DUCONMIX RSP PCE 830 is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Long-distance transporting
- Pumped concrete
- Ready mixed concrete
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

APPROVALS

- ASTM C-494 Type B, D & G
- EN 934-2: T3.1/3.2
- IS 9103 DA

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.08 ± 0.01 at 25 °C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- High workability for longer periods
- Lower pumping pressure
- Higher ultimate strengths
- Good dispersion even in mixes with high fines
- Resistance to segregation even at high workability
- Longer workability with extended setting
- Reduced water content for a given workability
- Increased ease in finishing concrete

DOSAGES

For a 50kg bag of cementitious material, 150g to 250g DUCONMIX WPR 700 is recommended.



DUCONMIX RSP PCE 840

Retarding Superplasticiser for Ready-Mix Concrete Admixture based on PCE

DESCRIPTION

DUCONMIX RSP PCE 840 is an economical admixture based on modified polycarboxylic ether. It's specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation. The product has been primarily developed for applications in ready mix and site-batched concrete. DUCONMIX RSP PCE 840 is needed where DUCONMIX RSP PCE 830 will not provide required strength.

USAGES

- Long-distance transporting
- Pumped concrete
- Ready mixed concrete
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

APPROVALS

- ASTM C-494 Type B, D & G
- EN 934-2: T3.1/3.2
- IS 9103 DA

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.08 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- High workability for longer periods
- Lower pumping pressure
- Higher ultimate strengths
- Good dispersion even in mixes with high fines
- Resistance to segregation even at high workability
- Longer workability with extended setting
- Reduced water content for a given workability
- Increased ease in finishing concrete

DOSAGES

For a 50kg bag of cementitious material, 150g to 350g DUCONMIX RSP PCE 840 is recommended.



DUCONMIX ES PCE 860

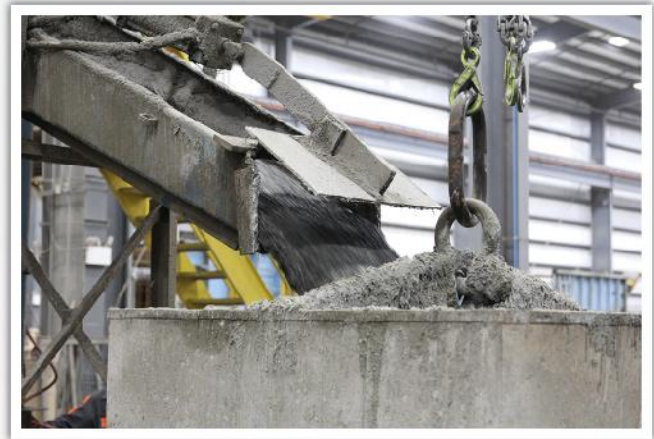
High range water reducing superplasticising early strength ready-mix concrete Admixture based on PCE

DESCRIPTION

DUCONMIX WS ES 860 is an economical admixture based on modified polycarboxylic ether. It is a new generation admixture based on second generation polycarboxylic ether polymer with high early strength gains. DUCONMIX WS ES 860 is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Precast concrete
- Capable for self-compaction
- Ready mixed concrete
- Concreting in cold weather
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions



APPROVALS

- ASTM C-494 Type A & F
- EN 934-2: T3.1/3.2
- IS 9103: 1999

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.08 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%



BENEFITS

- Low water cement ratio
- Obtain high early strengths
- Eliminate heat curing
- Improve surface appearance
- Rheoplastic & Rheodynamic concrete producing
- Optimize curing cycles by reducing curing time
- Increase productivity / reduction in cycle time
- Produce durable precast concrete elements
- Improved engineering properties, like traditional superplasticizer
- Early & ultimate compressive and flexural strengths
- Reduced shrinkage and low permeability

DOSAGES

350g to 750g DUCONMIX WS ES 860 per 50kg of cementitious material is normally recommended.



DUCONMIX WR SP 300

High early strength, high range water reducing/superplasticising, admixture for precast concrete

DESCRIPTION

DUCONMIX WR SP 300 is an admixture of a new generation based on second-generation polycarboxylic ether polymer with high early strength gains. DUCONMIX WR SP 300 is free of chloride & low alkali. It's compatible with all kinds of cements.

USAGES

DUCONMIX WR SP 300 is suitable for making precast concrete elements at all workabilities including Rheoplastic or Super Workable Concrete having fluid consistency, no segregation, a low water binder ratio and consequently high early and ultimate strengths. As a component of Zero Energy System. Concreting in cold weather.

APPROVALS

- ASTM C494 Type F
- EN 934-2 T3.1/3.2
- IS 9103: 1999

PERFORMANCE

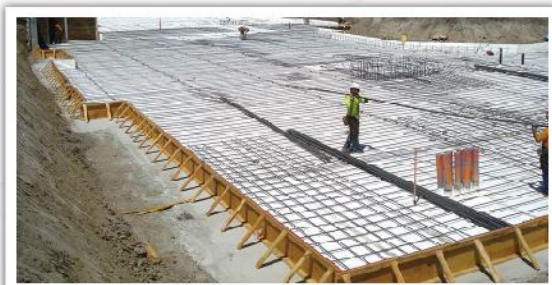
Aspect	Light Brown Liquid
Specific Gravity	1.0 9 ± 0.02 at 25 °C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- Achieve high early strengths
- Eliminate heat curing
- Improve surface appearance.
- Produces Rheoplastic and Rheodynamic concretes
- Optimize curing cycles by reducing curing time
- High workability for placing, compacting & curing
- Increase productivity/ reduction in cycle time.
- Produce durable precast concrete elements
- Improved engineering properties
- Compared to traditional superplasticizer
- Early and ultimate compressive and flexural strengths
- Reduced shrinkage and low permeability

DOSAGES

A dosage range of 250g to 600g per 50kg of cementitious material is normally recommended.



DUCONMIX WR SP 310

High early strength, high range water reducing/superplasticising, admixture for precast concrete

DESCRIPTION

DUCONMIX WR SP 310 is an admixture of a new generation based on second-generation polycarboxylic ether polymer with high early strength gains. DUCONMIX WR SP 310 is free of chloride & low alkali. It's compatible with all kinds of cements.

USAGES

DUCONMIX WR SP 310 is suitable for making precast concrete elements at all workabilities including Rheoplastic or Super Workable Concrete having fluid consistency, no segregation, a low water binder ratio and consequently high early and ultimate strengths. As a component of Zero Energy System. Concreting in cold weather.

APPROVALS

- ASTM C494 Type F
- EN 934-2 T3.1/3.2
- IS 9103: 1999

BENEFITS

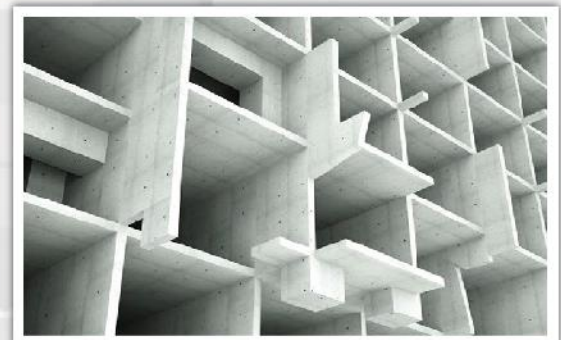
- Achieve high early strengths
- Eliminate heat curing
- Improve surface appearance.
- Produces Rheoplastic and Rheodynamic concretes
- Optimize curing cycles by reducing curing time
- High workability for placing, compacting & curing
- Increase productivity/ reduction in cycle time.
- Produce durable precast concrete elements
- Improved engineering properties
- Compared to traditional superplasticizer
- Early and ultimate compressive and flexural strengths
- Reduced shrinkage and low permeability

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.09 ± 0.02 at 25°C
pH	≥6
Chloride ion Content	<0.2%

DOSAGES

A dosage range of 250g to 700g per 50kg of cementitious material is normally recommended.



DUCONMIX WR SP 320

High-performance superplasticiser retarding and early strength concrete admixture

DESCRIPTION

DUCONMIX WR SP 320 is an admixture of a new generation based on modified polycarboxylic ether. The product has been primarily developed for applications in high performance concrete where the ultimate durability and performance is required. DUCONMIX WR SP 320 is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Production of Smart Dynamic concrete
- High performance concrete for durability
- High early and ultimate strength concrete
- High workability without segregation or bleeding
- Precast & Pre- stressed concrete
- Concrete containing pozzolans such as microsilica, GGBFS, PFA including high volume fly ash concrete

APPROVALS

- ASTM C-494 Type G
- EN 934-2: T3.1/3.2
- IS 9103: 1999

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.08 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- Elimination of vibration and reduced labour cost in placing
- Marked increase in early & ultimate strengths
- Higher E modulus
- Improved adhesion to reinforcing and stressing steel
- Lower permeability - increased durability

DOSAGES

For a 50kg bag of cementitious material, 150g to 750g DUCONMIX WR SP 320 is recommended.



DUCONMIX WR SP 330

High-performance superplasticiser retarding and early strength concrete admixture

DESCRIPTION

DUCONMIX WR SP 330 is an admixture of a new generation based on modified polycarboxylic ether. The product has been primarily developed for applications in high performance concrete where the higher durability and performance is required. DUCONMIX WR SP 330 is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Production of Smart Dynamic concrete
- High performance concrete for durability
- High early and ultimate strength concrete
- High workability without segregation or bleeding
- Precast & Pre- stressed concrete
- Concrete containing pozzolans such as microsilica, GGBFS, PFA including high volume fly ash concrete



APPROVALS

- ASTM C-494 Type G
- EN 934-2: T3.1/3.2
- IS 9103: 1999

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.09 ± 0.01 at 25 °C
pH	≥6
Chloride ion Content	<0.2%

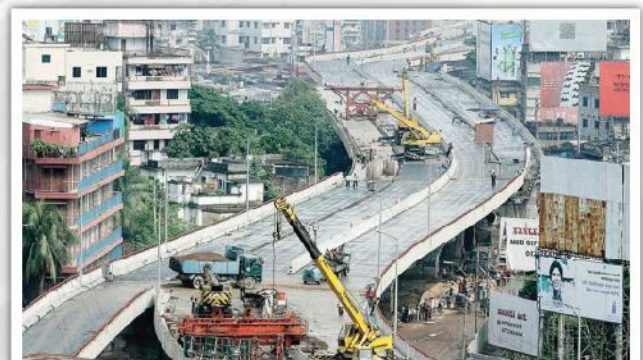


BENEFITS

- Elimination of vibration and reduced labour cost in placing
- Marked increase in early & ultimate strengths
- Higher E modulus
- Improved adhesion to reinforcing and stressing steel
- Lower permeability - increased durability

DOSAGES

For a 50kg bag of cementitious material, 150g to 650g DUCONMIX WR SP 330 is recommended.



DUCONMIX WR SP 340

High-performance superplasticiser retarding and early strength concrete admixture

DESCRIPTION

DUCONMIX WR SP 340 is an admixture of a new generation based on modified polycarboxylic ether. The product has been primarily developed for applications in high performance concrete where the highest durability and performance is required. DUCONMIX WR SP 340 is free of chloride & low alkali. It is compatible with all types of cements.

USAGES

- Production of Smart Dynamic concrete
- High performance concrete for durability
- High early and ultimate strength concrete
- High workability without segregation or bleeding
- Precast & Pre- stressed concrete
- Concrete containing pozzolans such as microsilica, GGBFS, PFA including high volume fly ash concrete

APPROVALS

- ASTM C-494 Type G
- EN 934-2: T3.1/3.2
- IS 9103: 1999

PERFORMANCE

Aspect	Light Brown Liquid
Specific Gravity	1.09 ± 0.01 at 25°C
pH	≥6
Chloride ion Content	<0.2%

BENEFITS

- Elimination of vibration and reduced labour cost in placing
- Marked increase in early & ultimate strengths
- Higher E modulus
- Improved adhesion to reinforcing and stressing steel
- Lower permeability - increased durability

DOSAGES

For a 50kg bag of cementitious material, 150g to 750g DUCONMIX WR SP 340 is recommended.



DUCONMIX WR SP 350

High Range Water Reducing/New Generation Superplasticizing concrete Admixture based on PCE

DESCRIPTION

Duconmix WR SP 350 is a polycarboxylic ether based, high range water reducing new second generation super plasticizer concrete admixture developed for ready-mix concrete and precast industry that needs high early and final strengths and durability.

USAGES

- In the production of self-consolidating and self-compacting concrete.
- In the production of Rheodynamic concrete that can easily set to densely reinforced concrete elements.
- In the production of 18-24 hours and 28 days high strength concrete.
- In the production of precast and prefabricated concrete.
- In the production of ready-mix concrete.

APPROVALS

- ASTM C-494 Type ALL
- EN 934-2: T3.1/3.2/7
- IS 9103: 1999

PERFORMANCE

Structure of Material	Polycarboxylic ether based
Aspect	Liquid Brown
Density	1.082 - 1.142 kg/liter
pH	6-7
Chloride Content	<0.1 %
Alkaline Content	<3%



BENEFITS

- Improves concrete's early and final compressive and flexural strengths, adherence to steel, and impermeability compared to traditional super plasticizers.
- Improves concrete's mechanic properties like carbonation, resistance to chlorine ion attack, resistance to aggressive chemicals, shrinkage, and creeping.
- Enables the production of low water/cement ratio, low segregation and leaching risk Rheoplastic concrete.
- Enables production of high early strength concrete even in low temperatures.
- Minimizes stripping time.
- Improves wear resistance of concrete by reducing segregation and bleeding.
- Reduces application periods of resin based pavement systems on new concrete with its low water/cement ratio, high early strength and bleeding reduction properties.
- Increases Freezing-Thawing resistance of concrete.
- Reduces curing time and curing temperature in the production of precast elements.

DOSAGES

250g to 750g DUCONMIX WR SP 350 per 50kg of cementitious material is normally recommended.

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