

KFDN-WP230

High Performance Multi-purpose Water-Proofing Concrete Admixture

I. Introduction

KFDN-WP230 Multi-purpose concrete water-proofing admixture is a combination of high performance water reducing concrete admixture and organic polymer. Meeting the concrete water-proofing standard (JC474-1999), KFDN-WP230 can significantly improve concrete performance. It reduces water dosage, reduces seepages, overcome segregation, reduces micro-cracks, improve stability and integrity. Hence, it can greatly improve workability of concrete, increase strength and enhance water-proofing capability by reducing water infiltration.

KFDN-WP230 is suitable for projects involving typical water-proofing constructions and pre-mixed water-proofing concrete applications.

General specifications listed as follows:

- Appearance: Dark brown liquid
- Specific gravity: 1.20 ± 0.02 at 20°C
- Total solids content: $39 \pm 2\%$
- PH value: 6 - 9
- Chloride Content: Less than 0.2%.

II. Typical Applications

KFDN-WP230 is typically used in works including:

- Underground construction
- Tunnel
- Water reservoir
- Water tower
- Water canal
- Mine pit

III. Features and Performance

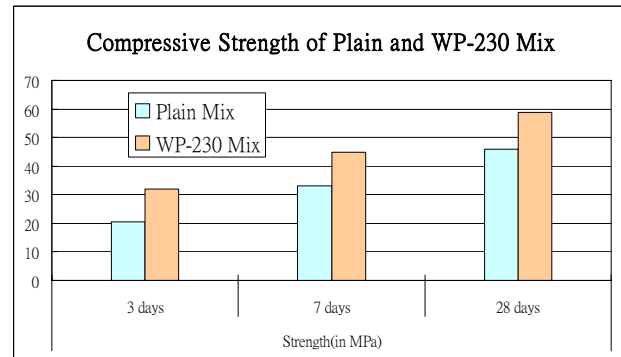
1. Water-proof and reduce concrete permeability:
 - KFDN-WP230 can significantly reduce concrete permeability.
 - Ability to resist water pressure of over 1.2MPa. (JC-474-1999: S12)
2. Reduce water dosage and improve strength
 - KFDN-WP230 can reduce water dosage by at least 15%. (assume same mix proportion and slump requirement)
 - KFDN-WP230 can improve 3 and 7 day compressive strength by over 30%. The 28 day compressive strength can also be raised by over 15%.
3. Improved workability performance
 - KFDN-WP230 can improve concrete workability.
 - It can reduce bleeding, reduce segregation and improve pumping ability.

4. Corrosion resistant

- KFDN-WP230 has extremely low chloride content.
- It will not corrode steel reinforcements.

5. Compressive Strength and Permeability Resistance

Items	Plain Mix	WP-230 Mix	Change
W/C ratio	0.551	0.443	-19.60%
Dosage (ml/100kg)	-	1200ml	-
Slump	150mm	150mm	-
Water Reduction	-	18.0%	18.0%
Strength(in MPa)			
3 days	20.5	32.0	+56.1%
7 days	33.2	44.9	+35.2%
28 days	46.0	58.8	+27.8%
Permeability resistance (water pressure)	0.6 MPa	>1.2 MPa	>100%



IV. Method of Use

- Mix proportion: 0.8-2.5% of cement dosage. (typical application is 1.0-2.0% of cement dosage).
- Actual mix proportion could vary according to construction requirements (e.g. ambient temperature, concrete transportation distance etc). First time users please undertake complimentary tests and procedures according to project's specification of works.

V. Package information

Aqueous form available in 1000 Kg containers. All products have 6 month validity. Avoid high heat storage and exposure to direct sunlight.

VI. Inquiries & Technical Support

Our support team consists of highly trained technical professionals. Please contact your local representatives for further arrangements.

Project References

Hong Kong

1. Hong Kong – Shenzhen Western Corridor
2. Hong Kong New International Airport
3. Hong Kong Housing Authority Projects
4. Airport Express Station
5. KCRC East Tsimshatsui interchange and Taiwai Depot etc.



Hong Kong – Shenzhen Western Corridor

Guangzhou

1. Guangdong Olympic Stadium
2. Guangzhou Subway Stage II
3. Panyu Bridge
4. Dongpu Bridge etc.



Guangdong Olympic stadium

Shanghai



BankComm Tower

1. BankComm Tower
2. Shanghai Technology City
3. Eastern Airline Tower
4. General Motor Plant
5. Light-rail Mingzhu Line
6. Huqingping Highway etc.



Shenzhen CMB Tower

Shenzhen

1. Saige Plaza
2. Shenzhen Subway
3. ICC Tower
4. Panglin Plaza
5. World Trade Plaza
6. Qilin Freeway Interchange
7. Jinguang Center etc.

Macau and Taiwan

1. Macau Hotel Lisboa New Wing
2. Macau Great Wall Building
3. Macau Nanfong Building
4. Taiwan Central Expressway No.2 etc.



Macau Hotel Lisboa new wing

Other

1. Jingzhou Yangtze River Bridge
2. Beijing-Zhuhai Expressway
3. Zhejiang University Campus Town
4. Huandao Expressway
5. Hainan International Commercial Building etc.



Jingzhou Yangtze river bridge

KFDN has wide spread references in Southeast Asia, more references could be provided upon request.

:: Statements of responsibility ::

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