

# KFDN-SP8G(H)

## Superplasticizer and HPC Pumping Aid

### I. Introduction

KFDN-SP8G(H) is a naphthalene-based superplasticizer and a HPC pumping aid. Complied standards include BS 5075 (UK), ASTM C494 (US) and 8076-1997(China).

The specifications of KFDN-SP8G(H) are as follows:

- Appearance: Dark brown liquid
- Specific gravity:  $1.20 \pm 0.02$  at  $20^{\circ}\text{C}$
- Total Solids Content:  $38\% \pm 2\%$
- PH value: 7-10
- Chloride content: Less than 0.2%
- Ash content:  $14 \pm 1\%$

### II. Typical Applications

KFDN-SP8G(H) is typically used in works including:

- Tall Building
- Road and Bridge
- Harbour, Power and Electricity Facilities
- Foundation and Substructure
- Drainage Works
- Prestressed Works

KFDN-SP8G(H) is specifically designed for high strength concrete Grade 50 or above.

### III. Features and Performance

1. High workability and set retarding capability.
2. Enhanced strength:
  - Increase 3-days/7-days strength up to 40-100%. 28-days strength up to 25% or above.
3. High plasticization effect:
  - Slump value increases 100 mm or above under same water cement ratio.
4. High water reducing capacity:

- Water reducing ratio is in between 15-30% (1.0-3.0% aqueous KFDN-SP8G(H) by weight of the cementitious).
5. Dosage:
    - Normal dosage ranges from 600ml to 3000ml per 100 kg cementitious. Overdose increases the setting time but brings no serious effect on concrete's strength.
  6. Compatibility:
    - KFDN-SP8G(H) admixture is compatible with Portland cement, microsilica, PFA and slag. KFDN-SP8G(H) admixture is also compatible with others admixtures, please seek the technical advice from KFDN's local representatives.

### IV. Method of Use

- Add aqueous solution to mixing water.
- Post-mixing addition. Mix the cementitious, aggregates and mixing water together first, then add the aqueous KFDN-SP8G(H) to concrete mixture.
- On-site addition. Add aqueous KFDN-SP8G(H) into the ready-mixed concrete mixture on site. Apply further mixing to standards.

### V. Package information

Aqueous forms 205 to 1000 litre aqueous pack or packaging size according to client's specific requirement. All products are with 6 months validity. Avoid direct sunlight storage.

### VI. Inquiries & Technical Support

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

Mix proportion and strength comparison of KFDN-SP8G(H) superplasticizer:

Water (kg)	Cement (kg)	Fly Ash (kg)	Blast Furnace Slag (kg)	KFDN-SP8G(H) (% of cementitious)	Coarse Aggregate (kg)	Sand (kg)	Slump (mm)	Strength (MPa)		
								3d	7d	28d
156	400	100	0	2.5%	1076	662	230	41.8	60.5	76.2
152	200	100	200	2.5%	1076	662	235	40.5	62.8	79.6

data is for reference only, our test uses Yuexiu cement, varying material might result in different test result.

# KFDN 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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