

KFDN-SP8

Superplasticizer and HPC Pumping Aid

I. Introduction

KFDN-SP8 is a naphthalene-based superplasticizer and a HPC pumping aid. Complied standards include BS 5075 (Britain), ASTM C494 (US) and GB 8076-1997(China).

The specifications of KFDN-SP8 are as follows:

- Appearance: Dark brown liquid
- Specific gravity: 1.19 ± 0.02 at 20°C
- Total Solids Content: 37% ± 2%
- PH value: 6-9
- Chloride content: Less than 0.2%
- Ash content: 13 ± 1%

II. Typical Applications

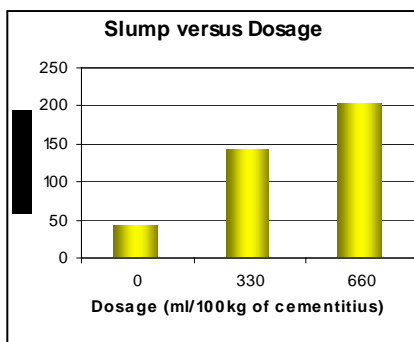
KFDN-SP8 is typically used in works including:

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

III. Features and Performance

1. High workability and set retarding capability.

Mix	Dosage (ml/100kg of cementitious)	Slump (mm)
Plain Mix	0.0	40.0
SP-8 Mix I	330.0	140.0
SP-8 Mix II	660.0	200.0



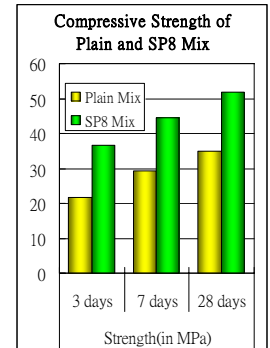
PowderSP8*	AqueousSP8*	Set Retarding Time
0.3-0.5	0.75-1.25	~1-3 hours
0.5-0.8	1.25-2.0	~3-5 hours
0.8-1.0	2.25-2.5	~5-8 hours

*By weight of the cementitious in %

2. Enhanced strength:

- Increase 3-days/7-days strength up to 40-100%. 28-days strength up to 25% or above.

Items	Plain Mix	KFDN-SP8	Change
W/C ratio	0.628	0.418	-33.4%
Dosage (ml/100kg)	0	1300	-
Slump(mm)	100	100	-
Air Content (%)	1.6	2.1	
Strength(in MPa)			
3 days	21.7	36.5	+68%
7 days	29.2	44.5	+52%
28 days	34.8	51.8	+50%



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 SP8 by weight of the cementitious).

5. Dosage:

- Normal dosage ranges from 600ml to 3000ml per 100 kg cementitious. Overdose increases the set time but brings no serious effect on concrete's strength.

6. Compatibility:

- KFDN-SP8 admixture is compatible with Portland cement, microsilica, PFA and slag. KFDN-SP8 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-SP8 to concrete mixture.
- On-site addition. Add aqueous KFDN-SP8 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 storage under direct sunlight.

VI. Inquiries & Technical Support

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



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 ::

- The technical information and application advice given in this KFDN publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption could be made as to a product's suitability for a particular use or application for a specific work or situation. No warranty would be released for its accuracy, reliability or completeness; either expressed or implied, other than those required by law. It is advised that the user should shoulder the responsibility to check the suitability of products for their building works.
- Field service provided would not assume any supervisory responsibility. Suggestions made by KFDN either in oral or written form might be followed, modified or rejected by the owners or their official representatives as KFDN could not overwhelm the responsibility of the official procedures manager.