

PENTENS Q-SET

Plasticising Accelerator

Product Data Sheet

Description

PENTENS Q-SET is a new generation, dual action liquid, high range water reducer and hardening accelerator for promoting a high early strength without negatively influencing final strengths. PENTENS Q-SET is chloride-free and is compatible with all types of Portland cement, including Sulphate Resistant Cement (SRC).

Uses

- Precast concrete elements
- Bridges and cantilever structures
- Areas of concrete where formwork must be removed quickly or early loading applied
- Prestressed concrete

Advantages

- Water reduction up to 30% depending on dosage.
- Early strength is greatly improved with its use.
- Ultimate strength (28 days) unaffected.
- Chloride-free.
- Non-corrosive.

Typical Performance

Comparison of early strengths of concrete produced between normal HRWR and PENTENS Q-SET

Mix Design	HRWR Concrete	PENTENS Q-SET
OCP (Type 1)	450 kg /m ³	450 kg /m ³
S/A	0.40	0.40
W/C	0.45	0.45
HRWR	4.5 litre /m ³	-
PENTENS Q-SET	-	4.5 litre /m ³
Concrete Temperature	31°C	31°C
Slump (mm)	90	80
Compressive Strength (N/mm ²)		
10 hours	5.20	15.00
12 hours	9.00	18.50
14 hours	13.20	22.20
24 hours	22.40	29.00

Technical & Physical Data

Appearance	Transparent
Shelf Life	1 year from the date of production when stored unopened
Storage Condition	Store in a dry, cool place
Packaging	4 litre /pail 20 litre /pail

Instruction for Use

Dosage

PENTENS Q-SET can be used at the rate of 1.0 litre per 100kg of cement content per cubic meter. It is recommended that trial mix should be conducted to determine the exact dosage required.

Dispensing

PENTENS Q-SET shall be dispensed neatly into the premixed concrete after all the other concrete components including water have been discharged into the pan-mixer or truck mixer. To obtain optimum concrete performance, do not dilute PENTENS Q-SET.

Safety

As cement may trigger allergic reaction to alkaline that can lead to irritation, wear gloves and goggles when using it. If contact with eyes occurs, rinse with plenty of water and seek medical advice if symptoms persist.

PENTENS



UFON NANO-CHEMICAL LTD.

8F, No.2, Lane 348, Sec 2, Chung-Shang Road,
Chung Ho City, Taipei Hsien, Taiwan, R.O.C.
Tel: +886 2 2240 0220 Fax: +886 2 2242 6536
URL: www.pentens.com
E-mail: pentens@ms35.hinet.net

DONG JI (M) SDN. BHD.

No.8, Jalan TPP 5/7, Taman Perindustrian Puchong,
47100 Puchong Selangor, Malaysia.
Tel: +603 8060 4396 Fax: +603 8060 4394
URL: www.pentens.com.my
E-mail: dji@pentens.com.my