Technical Datasheet

IZOZEN® IZONEP 501 PK

High Range Water Reducing And Slump Retaining Concrete Admixture

Description

IZOZEN® IZONEP 501 PK is used as a highly effective waterreducing agent and superplasticizer for the production of high quality, free flowing concrete in hot climates. The dual action of IZOZEN® IZONEP 501 promotes accelerated hardening with high early and ultimate strengths.
IZOZEN® IZONEP 501 PK provides the following properties:

As a Superplastiziser

- Long-lasting control of slump loss.
- No adverse effect on ultimate strengths.

Substantial improvement in workability without increased water or the risk of segregation.

As a Water Reducer

- Early strengths significantly increased.
- High ultimate strengths.
- > 15% water reduction.
- Especially suitable for hot climates.
- No excessive air-entrainment.
- No adverse shrinkage effect.
- Improved surface finish.
- Increased water tightness.

Suitable for use in hot and tropical climatic conditions

Fields of application

IZOZEN® IZONEP 501 PK can be used wherever high quality concrete is demanded under difficult placing and climatic conditions.

Technical data

Form:	Sulphonated Naphthalene
Colors:	Brown Liquid
Specific Gravity:	~1.17 kg/l (+25 °C)
Total Chloride Ion Content:	Nil
Air contents:	Less than 1%
Flash Point	None
pH-Value	~ 5-8 at 25ºC

Directions for use

The standard rules of good concreting practice for production and placing must be observed when using IZOZEN® IZONEP 501 PK in concrete. Refer to relevant standards. Fresh concrete must be cured properly especially at high temperatures in order to prevent plastic and drying shrinkage. Use IZOZEN® IZOCURE products as a curing agent or apply wet hessian.

Compatibility
IZOZEN® IZONEP 501 PK may be combined with all types of Portland cement (OPC and SRC), concretes containing pozzolanic materials such as; GGBS, PFA, micro-silica.

We recommend to perform trial mixes to establish the required performance when combining IZOZEN® IZONEP 501 PK with the above products or other admixtures. Please consult our IZOZEN Technical Department.

Consumption

0.8 - 3.0 % by weight of binder.

Higher dosages by weight of binder can be used depending on the mix design, raw materials, climatic conditions and concrete requirements. Trial mixes must be performed to establish the exact dosage rate required.

Packaging

200 L Drum, 1000 L flowbin.
Bulk supply in tanker trucks possible on request

APPROVALS / CERTIFICATES

IZOZEN® IZONEP 501 PK follows the requirements of ASTM C494; Type G and EN 934-

Shelf life – Storage

12 months from date of production if stored properly Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +5 °C and +45 °C.
Protect from direct sunlight and frost.

Remarks

Before pouring suitability tests on the fresh concrete must be carried out.
Due to the extended workability take special care that formwork is properly installed and secured. If frozen and/or if precipitation has occurred, it may only be used after thawing slowly at room temperature and intensive mixing. When using IZOZEN® IZONEP 501 PK a suitable concrete mix must be designed for the local material sources and should be trialed. When accidental overdosing occurs the set retarding effect and workability increases.
Additional air may also be entrained. During this period the concrete must be kept moist in order to prevent premature drying out.

IZOZEN® Health and Safety Message

- Always wear safety goggles, Mask, Helmet when working with hazardous materials.
- Follow safety procedures at all times when using power tools.
- Make sure your work area is tidy and free of trip hazards.
- Watch where you're walking – don't run in the workplace!
- Always use the appropriate lifting technique when moving heavy objects.
- Keep jewelry and other loose objects away from machinery.
- Don't eat or drink near hazardous materials.
- Report unsafe conditions immediately to your supervisor.
- Wear the correct clothing for the job – no loose clothing or jewelry!
- Take regular breaks and stay hydrated while working.
- Always be aware of your surroundings.
- Always use personal protective equipment when working with chemicals.

IZOZEN® CHEMICALS (PRIVATE) LIMITED
Office No. 17, Sun Rise Arcade, Near DHA Phase II,
Gate II, Main G.T Road, Islamabad, Pakistan 44000
Phone No. 0092 (51) 441 9497
Email: information@izozen.com
Web: www.izozen.com

MANUFACTURING UNIT
Plot No. 38, Street NS-1, Rawat Industrial Estate,
Islamabad, Pakistan, 45900
Email: information@izozen.com
Web: www.izozen.com

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