COMPLEX KC-402

Cement & Concrete Performance Admixture

PRODUCT TYPE	Multi-function admixture for cement-based products	**ORIGIN**	China
MAIN FUNCTIONS	Workability • Strength development • Water-resistance support	**APPLICATION**	Tiles, blocks, bricks & concrete products

1. Product Description

Complex KC-402 is a specialized admixture/additive for cement, mortar and concrete-based products. It is intended to improve mix workability and support strength development and water resistance when used with a properly designed mix. It is particularly suitable for manufactured concrete products where surface appearance, handling properties and durability are important. The product used in pavement and parking tiles, hollow concrete blocks, fly ash bricks and other compatible cement-based products.

2. Key Benefits

FEATURE	FUNCTION / BENEFIT
Improved workability	Supports smoother mixing, easier placing/compaction and more consistent production.
Strength support	Contribute to improved strength when dosage, water content, curing and mix design are properly controlled.
Water-resistance support	Helps support reduced water penetration in a suitable formulation; performance depends on the complete mix and curing.
Surface finish	Help produce a denser, more uniform surface and enhance the appearance of coloured concrete products.
Pigment compatibility	High Compatibility with various types of industrial color

3. Typical Applications

• Pavement and parking tiles, including coloured or decorative concrete tiles

• Hollow concrete blocks and other precast concrete units

• Fly ash bricks and compatible cement-based masonry products

• Cement mortar and selected concrete mixes

• Suitable to make ready-mix concrete, self-compact concrete

• Used in self-leveling flooring materials and grout

• Used to make high strength gypsum products

4. Technical Data

PARAMETER	TYPICAL / AVAILABLE DATA
Appearance / physical form	Liquid
Colour	Reddish Brown
Chemical composition	PCE Based
Density / specific gravity	1.05-1.12
pH value	7 - 9
Solid content	Nill
Compressive strength effect	Increase strength
Chloride content	≤0.10%
Shelf life	24 month

5. Recommended Use & Mixing Procedure

• **Preliminary approach:** Add KC-402 at a dosage established by supplier guidance, usual dose 300 ml may vary depending on specific application. Do not assume a dosage until the product form and concentration are confirmed.

• Maintain a consistent cementitious material ratio, aggregate grading, pigment dosage and water content. Do not add excess water to improve workability.

• Run trial batches and compare control and treated mixes for workability, demoulding, surface finish, compressive strength and water absorption. Use the applicable local or project test standards.

•

6. Storage, Handling & Safety

Store in the original, tightly closed and clearly labelled packaging in a dry, protected area. Protect from excessive heat, freezing and contamination. Avoid eye and prolonged skin contact. Use suitable gloves, eye protection and normal dust/splash precautions. Consult the product Safety Data Sheet (SDS) for first aid, spill response and disposal guidance.

7. Quality Control & Disclaimer

The stated functions are general intended-use descriptions and are not a guarantee of specific performance. Results depend on cement type, mix proportions, water/cement ratio, aggregates, pigments, production method, compaction and curing. Before commercial use, confirm the product specification, compatibility, dosage and performance through laboratory and field trials.