# **KUT PLAST IWP**

## **Integral Waterproofing Admixture**

ADM-10-1110



## **DESCRIPTION**

**KUT PLAST IWP** is a cholride - free waterproofing plasticising admixture which functions by forming an internal barrier against water penetration in concrete for production of reinforced concrete for structures subjected to high stress and where waterproof concrete and mortars are required. **KUT PLAST IWP** produces a cohesive and more workable concrete at constant water cement ratio or a concrete with same workability @5% water reduction when used at recommended dosage.

#### **USES**

**KUT PLAST IWP** is specially recommended to be used in concrete which in contact with soil, foundations, walls, floors that must be water tight and in reinforced, pre-stressed concrete subjected to high stress, such as desalination plants, tunnels, culverts, sewage plants, water reservoirs, silos, pits, foundations, terraces, balconies and cellars **KUT PLAST IWP** is also recommended for use alongwith **KUT PLAST NA/EDS** for interlock blocks & tiles.

## **ADVANTAGES**

**KUT PLAST IWP** offers following advantages:

- Increased workability: Reduces placing time.
- **Improved Strength:** Water reduction give higher strengths without cement increase or workability loss.
- **Water proofing:** Provides better dispersion of cement particles giving closer packing and reduces pore size and minimises capillary action in concrete.
- Provides protection against penetration of dampness and water under pressure.
- Breathability: The concrete retains its capacity to breathe.
- Integral: It is not a membrane or surface film.
- Water absorption: Reduces water absorption
- Easy to use: No special skills or extra labour is

## required.

- Chloride free: Safe in reinforced concrete.
- Compatibility with cements: Can be used with all types of Portland cements including sulphate resisting cement

## **TYPICAL PROPERTIES**

- Calcium Chloride Content: Nil to BS 5075:1982.
- Specific Gravity: 1.03 to 1.05 at 20°C.
- Air Entrainment: Less than 1% additional air is entrained.
- **Setting Time:** Less than 2 hr. retardation at normal dosage.
- **Cement compatibility:** Compatible with sulphate resisting and other portland cements.
- Admixture compatibility: Generally compatible with all other ASPEC concrete admixture if added separately to the mix.
- Water Proofing: Water penetration typically less than 30mm when tested to DIN 1048 Part 51991 and D 1045 Page 24 clause 6.5.7.5 on at least 3 test cube made from a concrete with w/c ratio of 0.45 at an age of 28 35 days and expressed as an average in mm





## **INSTRUCTION FOR USE**

**KUT PLAST IWP** itself can not make poor quality concrete water proof. It has to be added in good quality concrete with w/c ratio of 0.4 to 0.6. It will require good concrete practice and good compaction of concrete.

**Dosage: KUT PLAST IWP** should be added at a rate of 1% of cement by weight, optimum dosage should determined by site trials with actual site conditions.

**Overdosing:** An overdose of double the recommended amount of **KUT PLAST IWP** will result in some retardation and increased air entrainment. The ultimate compressive strength of concrete will not be significantly affected.

**Curing**: As with all structural concrete, normal curing methods apply

## **TECHNICAL SUPPORT**

**ASPEC** provides technical support service on mix design, admixture selection, evaluation of trials, dispensing equipment etc. Please contact the Technical Department in these cases.

**Cleaning:** Spillage of **KUT PLAST IWP** can be removed with water.

## **PRECAUTIONS**

## **HEALTH AND SAFETY**

**KUT PLAST IWP** is non-toxic. Any splashes to the eyes should be washed immediately with water and medical advice should be sought.

FIRE: KUT PLAST IWP is non-flammable.

**ASPEC** endeavours to ensure that any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

Distributor