



SPWR - Super Plasticiser & Water Reducer

for Better Quality & Durability

CETEX - SuperPlasticiser & Water Reducer (SPWR) increases the workability (plasticity) of the concrete mix for constant water to cement ratio. The same level of workability is achieved at reduced water cement ratio. It reduces the water bleeding. It is used as **superplasticiser** for production of free flowing concrete for slabs, foundations, walls, beams, columns and piers; areas with dense reinforcement, etc. As **water reducing** agent it is used for early and ultimate high strength concrete such as pre-cast concrete, pre-stressed concrete, bridges, cantilever structure and foundations, etc. **It complies with ASTM-C-494 Type A/D, IS- 9103.**

ADVANTAGES

- ✓ It significantly improves the workability of the concrete mix. In presence of the admixture, the slump value increases resulting in ease of placing the concrete mix.
- ✓ Addition of the admixture can reduce the water content of the concrete mix by 40% or more, which results in more dense concrete, thereby increasing the compressive strength. This improves the durability, impermeability and frost & water resistant properties of the mix.
- ✓ It decreases the amount of vibration required and it significantly reduces the risk of segregation.
- ✓ Economics in mix design can be achieved by reducing cement usage.

PROPERTIES

Type	: Modified Sulphonated Naphthalene Formaldehyde Condensate (SNF)
Colour	: Dark Brown/Black liquid
Specific gravity	: 1.20 +/- 0.02 at 25°C
Chloride Content	: Nil
Nitrate Content	: Nil

MECHANISM

When Portland cement is mixed with water, the cement agglomerates stick to each other due to insufficient mutual electrostatic repulsion. With the presence of **CETEX-SPWR**, the attraction between the particles is reduced and the cement particle disperse, hence a more cohesive and consistent mix is achieved.

DOSAGE

150 – 400 ml per 50 kg of cement is recommended. However, field trials should be conducted to determine the optimum dosage to achieve the required condition of the mix.

USAGE

CETEX-SPWR should be added to the concrete mix during the mixing cycle after addition of water. **Never add the admixture to the dry mix.**

PACKING

CETEX-SPWR is available in 25, 60 or 250 kg pack or bulk. Store in frost-free condition away from sunlight or extreme heat. For best result, use within one year.