

Silurry® 500

Silica Fume Slurry Admixture

Uses

- Any construction project requiring the protection provided by highly durable, low permeability concrete
- Projects requiring high-strength/high-performance concrete
- Steel-reinforced concrete structures or wet shotcrete applications exposed to deicing or airborne salts

Advantages

- Increased concrete service life
- Increased strength
- Increased modulus of elasticity
- Reduced permeability thereby increasing durability
- Increased resistance to sulfate attack
- Increased resistance to alkali-silica reactivity

Standards compliance

Silurry 500 conforms with ASTM C1240, Standard Specification for Silica Fume used in Cementitious Mixtures.

Description

Silurry 500 admixture is based on a silica fume admixture to produce extremely strong, durable concrete. These include silica fume and Distributor admixture. Silurry 500 admixture meets the requirements of ASTM C 1240, Standard Specification for Silica Fume used in Cementitious Mixtures.

Typical dosage

Silurry 500 silica fume admixture is recommended for use in concrete and wet shotcrete applications at an addition dosage of 2-20% by mass of cement.

Properties

Appearance	Gray Slurry
Microsilica (Min%)	50
Specific Gravity (gr/cm ³)	1.4

Instructions for use

Compatibility:

Silurry 500 is compatible with other Capco admixtures used in the same concrete mix. All admixtures should be added to the mix separately and must not be mixed together prior to addition. The resultant properties of mixes containing more than one admixture should be assessed by the trial mix procedure recommended on this data sheet.

Dispensing:

The correct quantity of Silurry 500 should be measured by means of a suitably accurate device; and then added to the concrete during the mixing process either by hand, or mechanically.

Curing:

As with all structural concrete and sand : cement mixes, good curing practice should be maintained, particularly in situations where an overdose has occurred. Water

spray, wet Hessian or a Capcure O spray applied curing membrane should be used.

Limitations

The use of a suitable Super plasticizer with this product is recommended.

Packaging

Silurry 500 is available in 20 kg pails or 200 kg Barrels.

Storage

Silurry 500 has a minimum shelf life of 6 months at 35°C if kept in a dry store in the original, unopened packs. The shelf life will be reduced at higher ambient temperatures.

Precautions

Health and safety:

Silurry 500 is alkaline and should not come into contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin occurs, wash with water. Splashes to eyes should be washed immediately with plenty of clean water and medical advice sought.

Fire:

Silurry 500 is non-flammable.

Silurry[®]500

Table 1:

Silurry 500 Kg per 100 kg cement	All cementitious material	Plastit SPC10 Kg per 100 kg cement*	W/C ratio	Slump (cm)	Rapid chloride permeability (RCPT) (Coulomb)	Time (day)		
						3	7	28
						Compressive strength (kg/cm ²)		
0	400	0.55	0.35	12	3676	29.3	39.3	54.6
20	400	0.7	0.35	8	1185	35.3	48	63.3

* Plastit SPC10 is a high performance hyperplasticiser admixture, based on polycarboxylate

Table 2:

Silurry 500 Kg per 100 kg cement	All cementitious material	W/C ratio	Air content in fresh concrete (%)	Slump (cm)	Time (day)		
					3	7	28
					Compressive strength (kg/ cm ²)		
0	350	0.50	1.8	8	140	213	302
12	371	0.53	1.3	14	171	209	322