



LABOND C119

Super Plasticizing Concrete Admixture

1.0 Description

Labond C119 Super Plasticizing Concrete Admixture is a new generation hyperplasticizer for concrete. It contains polycarboxylate ether polymers and is specially formulated to give exceptionally high water reduction and impact extreme workability and superior slump retention. It is a non chloride liquid admixture which had been formulated to comply with the requirements of ASTM C 494 for Type G water-reducing, high range, and retarding admixtures. Fully meets the requirements of BS5075: Part 3: 1985 for retarding superplasticizing admixtures. It is compatible with all cements meeting recognized international standards.

Labond C119 is based on the versatility of polycarboxylate copolymer technology by tailoring its molecular attributes to perform significant dispersibility to cement particles. The acting mechanism of steric plus electric repulsion which overcome the effect of the reflocculation, providing greater dispersion than only electric repulsion from those conventional BNS and SMF base superplasticizers. Superior slump retention by the enhancement of the density of side chain grafts.

2.0 Advantages

- 2.1 High water reduction that allows to produce high early and ultimate strengths, low permeability and high durability concrete.
- 2.2 High flowability provides easy placement and consolidation.
- 2.3 Excellent cohesion, zero segregation and minimal bleed water even along with extremely high levels workability concrete.
- 2.4 Exceptional slump retention, enhanced easier placement and delivery control especially under hot climate condition.
- 2.5 High elastic modulus, low shrinkage and creep are achievable with proper controlled coarse and fine aggregates. Superior finishes with reduced honeycombing.

3.0 Technical Data

| | |
|----------------------|-----------|
| Appearance | Liquid |
| Colour | Straw |
| Specific Gravity | 1.07±0.02 |
| Chloride Ion Content | < 0.01% |

4.0 Typical Applications

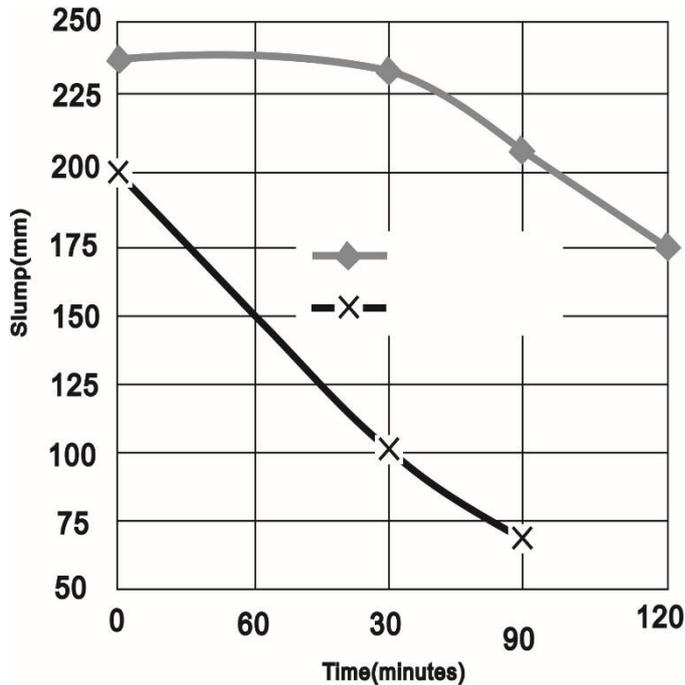
Dosage can be adjusted to meet vary mix design requirements or to specific job site conditions. Trial concrete mixes must be carried out to determine the appropriate dosage. Typical dosage is 1000 ml/100kg of cementitious binder.

- 4.1 High performance concrete
- 4.2 Mixing logistics efficiency during large pour
- 4.3 Highly flowable concrete
- 4.4 Highly durable concrete
- 4.5 Highly strength concrete
- 4.6 Ready-mixed concrete
- 4.7 Self consolidating concrete
- 4.8 Pumped concrete and wet sprayed concrete
- 4.9 Long distance transportation

Independent dispenser and feed line must be used. Labond C119 can be added to the mixing concrete, or into the mixing water, addition to any dry concrete mix is not recommended.



(5) Example of Labond C119 test data in comparison with traditional admixture for wet sprayed concrete.



| Mix Proportion | Test Mix A | Test Mix B |
|---------------------------------|------------------------|-------------------------------------|
| Cement | 470kg/m ³ | 470 kg/m ³ |
| Steel Fiber | 0 kg/m ³ | 0 kg/m ³ |
| Coarse aggregate (Max. 10mm) | 420 kg/m ³ | 420 kg/m ³ |
| Fine aggregate (River Sand) | 1280 kg/m ³ | 1280 kg/m ³ |
| Water | 188 kg/m ³ | 195 kg/m ³ |
| Water/Cement ratio | 0.400 | 0.415 |
| Admixture | Labond C119 | Traditional BNS Superplasticizer |
| Dosage by weight of binder | 1.00% | 1.84% |

6.0 Health and Safety

Wear personal protection such as use of hand gloves, safety goggles, etc., avoid inhalation or contact to eyes, skin, clothing etc. Wash eyes, face and hands well after handling.

Labond C119 does not contain any hazardous substances require labeling. But we recommend your attention that Materials Safety Data Sheet is carefully read prior to application of the material. Our recommendations for protective equipment and hygienic practices should be strictly adhered to for your personal protection.

7.0 Packaging

20L/Drum