

## CICO PLAST SUPER C-300

### Very High Range Water Reducing Admixture for Self-Compacting Concrete

**CICO PLAST SUPER-C-300** is a new generation of concrete admixture based on a blend of specially selected high molecular weight poly carboxylate ether (PCE) and organic polymers.

#### USES

**CICO PLAST SUPER-C-300** can be used to either produce high performance extremely workable **FLOWING CONCRETE** without loss of strength to enable large water reduction to be made for the same workability which results in a dense, water tight concrete with higher, early and ultimate strength. Water reduction up to 40% can be achieved through proper quality control.

#### ADVANTAGES

Substantial improvements in workability and flow properties without any increase in water, produces self-compacting concrete which can be poured into places around congested reinforcement and require little (or no) vibration to achieve optimum compaction. The bond strength of concrete to reinforcing steel is considerably increased.

The internal friction and thixotropy of the mix is reduced to a minimum without the risk of segregation, thus making the concrete very much workable. For self compacting concrete, use **CICO VISCOPLAST** to reduce excessive bleeding and settlement.

Very significant water reduction minimizes shrinkage or cracking, producing close textured impervious concrete with improved durability and surface finish. This is of particular importance in liquid retaining and water bearing structures. Suitable for use in most type of concrete above and below ground subject to surface water, water under pressure and aggressive atmospheric conditions.

For a given concrete mix keeping the cement consumption and workability constant, large reduction in the amount of mixing water (upto 40%) can be achieved to produce concrete of very high strength. Mainly over M-50 mixes CICO PLAST SUPER-C-300 can be used along with micro silica keeping the flow parameters tight (60 – 80 mm) for high initial and ultimate strength.

#### TECHNICAL DATA

|                                |   |
|--------------------------------|---|
| <b>Form</b>                    | Liquid  |
| <b>Colour</b>                  | Pale Yellow / Straw coloured  |
| <b>Specific Gravity</b>        | 1.09 ± 0.04   |
| <b>Air Entrainment</b>         | May increase very marginally  |
| <b>Setting &amp; Hardening</b> | There may be mild retarding effect on setting time.   |
| <b>pH Value</b>                | >6  |
| <b>Chloride Content</b>        | < 0.2%  |
| <b>Compatibility</b>           | Can be used with all types of Portland and slag cements including sulphate resistant cement |

### CONSISTENCY

**CICO PLAST SUPER-C-300** is formulated from carefully selected raw materials and is manufactured under control conditions to produce a consistent product.

### METHOD OF USE

**CICO PLAST SUPER-C-300** is supplied ready for use. For maximum dispersion throughout the mix measured quantity of **CICO PLAST SUPER-C-300** should be added directly into the mixer at the time of mixing water. On no account it should be added to the dry cement. To achieve best results, the concrete mixer should be rotated for 2-3 minutes after addition of **CICO PLAST SUPER-C-300**.

### PACKAGING

220 Kg drum/barrel packing.

### RATE OF ADDITION

With small dosage the increment of slump is more. The dosage depends on the cement content and the w/c ratio, aggregates and other additives. Generally 0.2 to 1.5% by wt. of cement can be used.

### HANDLING

**CICO PLAST SUPER-C-300** is formulated from chemicals, which present no fire or health hazards.

### STORAGE

If stored in unopened containers under shade at normal ambient temperatures, a shelf life of approximately 18 months could be expected.

#### Important Note:

All CICO products are sold in the market after strict Quality Control in line of ISO 9001 and guaranteed against any manufacturing defect. Although the basic formulation of Company's products generally remains unchanged, production refinements arising from continuing research and evaluation program may occasionally result in marginal changes in properties. CICO aspires to ensure that any recommendation, advice, test data, specification, method statement and other information given in this product datasheet is accurate and best of company's knowledge. Since, the company (CICO TECHNOLOGIES LTD) has no control over the selection of its product, applicators, application methodology, how and where it is applied, therefore, the company cannot accept any liability directly or indirectly arising from the use of its product. It is important to any customer, user or specifier satisfies him / herself that the product is suitable for the intended purpose including health, safety and environmental aspect. Unless or otherwise agreed in writing, all products of the company are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. All customers, users, specifiers should ensure that they examine the suitability of the product with company's latest product data sheet.

### CICO TECHNOLOGIES LIMITED

Corp. Office: C-44/2, 1<sup>st</sup> & 2<sup>nd</sup> Floor, Okhla Industrial Area,  
 Phase -II, New Delhi-110 020  
 Tel. No: 91-11-4050 9400, Fax: 91-11-4050 9413  
 E-Mail: [cicotech@cicogroup.com](mailto:cicotech@cicogroup.com)  
 Web Site: [www.cicogroup.com](http://www.cicogroup.com)



CTL/07-14/01