

## CUGLA® HR-51 CON.20%\* SPL

\*Also available in concentration: 23%, 25% and 30%



0956-CPR-1501

CUGLA HR-51 is the result of the development of a new generation of super plasticizer based on polycarboxylates.

CUGLA HR-51 gives concrete mortar a unique combination of properties, namely:

- Very high workability for 60 minutes
- Higher initial and final strengths due to the prevention of micro-bleeding
- Optimal density

This makes CUGLA HR-51 ideal for the following applications:

- High Strength Concrete
- Self Compacting Concrete

### Advantages

|                       |   |
|-----------------------|---|
| <b>Workability</b>    | The strong plasticizing effect can give concrete mortar with a very low water-cement factor a plastic and long workability.<br>With a modified mixture composition it is possible to produce a highly stable self-compacting concrete mortar. |
| <b>Strength</b>       | High initial and final strength.  |
| <b>Durability</b>     | Watertight concrete, environment class XA3.   |
| <b>Cement savings</b> | Standard compositions can be produced with considerably less cement.  |
| <b>Compaction</b>     | Production of self-compacting concrete mortar is possible without the segregation of the concrete mortar.   |

### Product properties

|                               |                                 |             |             |             |             |
|-------------------------------|---------------------------------|-------------|-------------|-------------|-------------|
| <b>Product name</b>           | CUGLA HR-51 SPL                 |             |             |             |             |
| <b>Category</b>               | Superplasticizing admixture     |             |             |             |             |
| <b>Manufacturer/supplier</b>  | CUGLA                           |             |             |             |             |
| <b>Colour code</b>            | Grey                            |             |             |             |             |
| <b>Effective component</b>    | Modified poly carboxylate ether |             |             |             |             |
| <b>Physical state</b>         | Liquid                          |             |             |             |             |
| <b>Colour</b>                 | Brown                           |             |             |             |             |
| <b>Soluble in water</b>       | Yes                             |             |             |             |             |
| <b>Concentration</b>          | %                               | 20          | 23          | 25          | 30          |
| <b>pH</b>                     |                                 | 2 - 8       | 2 - 8       | 2 - 8       | 2 - 8       |
| <b>Absolute density</b>       | kg/l                            | 1,05 ± 0,02 | 1,05 ± 0,02 | 1,05 ± 0,02 | 1,07 ± 0,02 |
| <b>Dry material content</b>   | %                               | 20 ± 1,0    | 23 ± 1,1    | 25 ± 1,2    | 30 ± 1,5    |
| <b>Total chlorine</b>         | %                               | < 0,1       | < 0,1       | < 0,1       | < 0,1       |
| <b>Water soluble chlorine</b> | %                               | < 0,1       | < 0,1       | < 0,1       | < 0,1       |
| <b>Alkali content</b>         | %                               | 1,0         | 1,0         | 1,0         | 1,5         |

### Use and dosage instructions

|                                   |  |      |      |      |     |
|-----------------------------------|--|------|------|------|-----|
| <b>Manner / moment of dosage</b>  | Preferably add to the last part of the mixing water  |      |      |      |     |
| <b>Recommended dosage</b>         | Depending on the desired consistency of the concrete   |      |      |      |     |
| <b>Processing temperature</b>     | 5 - 30 °C  |      |      |      |     |
| <b>Shelf life and storage</b>     | Up to 1 year after manufacturing date, frost-free  |      |      |      |     |
| <b>Suitable for use in</b>        | Non-reinforced concrete<br>Reinforced concrete<br>Pre-stressed concrete                                    |      |      |      |     |
| <b>Not compatible with</b>        | Aluminium cement: only in consultation with CUGLA<br>Other admixtures: only in consultation with CUGLA     |      |      |      |     |
| <b>Concentration</b>              | <b>%</b>   | 20   | 23   | 25   | 30  |
| <b>Maximum recommended dosage</b> | <b>% in regard to cement</b>   | 1,5  | 1,3  | 1,2  | 1,0 |
|                                   | <b>cc per 100 kg cement</b>  | 1429 | 1238 | 1143 | 935 |
|                                   | For dosage higher than the maximum recommended dosage, please contact the Cugla Product Manager for advice |      |      |      |     |

### Packaging

In cans, barrels, containers and/or bulk

### Health and environmental factors

Cugla recommends that when using Cugla admixtures:

- Should the product come in contact with eyes, rinse immediately with water and seek medical advice.
- Should the product come in contact with skin, wash immediately with soap and water.
- Should you feel ill, consult a doctor, showing him/her this sheet or the safety information sheet.

**For detailed information we refer to the safety data sheet, SDS Cugla HR-51 SPL, on our website.**

Changes to this document will not automatically be issued. Any previous product information hereby becomes null and void. The above data is provided to the best of our knowledge. The tests have been carried out under laboratory conditions. We will not accept any liability for the results achieved on the work, now that we have no influence on the process nor the specific conditions of the work.

Our general sales, delivery and payment conditions apply to all our transactions and are available at [www.cugla.com](http://www.cugla.com).