# **DEGA WR-B 5850**

# HIGH RANGE WATER REDUCING/ NEW GENERATION SUPER PLASTICIZING RAW MATERIAL FOR CONCRETE ADMIXTURE

### **Product Definition**

**DEGA WR-B 5850** is a new generation of environmentally friendly superplasticizer additive chemicals developed for polycarboxylate based, highly water reducing and high-performance concrete. Due to its extremely high-water reduction rate, it greatly increases the plasticity index of fresh concrete, thereby improving the pumping and workability of concrete.

## **Technical Properties**

| Chemical Content     | Polycarboxylate polymer based |
|----------------------|-------------------------------|
| Color, Appearance    | Colorless-pale yellow liquid  |
| рН                   | 2,00 – 4,00                   |
| Density              | 1,09 ± 0,02 g/cm <sup>3</sup> |
| Solid Content (%)    | 50,0 ± 1,0                    |
| Chlorine Content (%) | < 0,1 (EN 480-10)             |
| Alkaline Content (%) | < 5,0 (EN 480-12)             |
| Compliance with      | TS-EN 934-2                   |
| Standards            |                               |

#### **Advantages**

- Increases fluidity at a high rate.
- It reduces the amount of water used in the concrete mixture by up to 40%.
- Increases early and final strength.
- It increases the processability of the products.
- Improves water impermeability.
- Reduces cracking and segregation.
- Concrete with low water / cement ratio and low risk of decomposition and vomiting is obtained.
- It minimizes mold removal time.
- It increases the abrasion resistance of concrete by reducing segregation and sweating.
- Shortens the time for applying resin-based flooring systems on new concrete.
- It increases the resistance of concrete against freeze-thaw cycle.
- It saves vibration workmanship and energy since it is easily placed in the mold.
- It easily fits into tightly fitted sections and ensures a smooth, concrete surface without gaps.
- It provides early high strength concrete production even at low temperatures.
- It has a high alkaline tolerance.
- It works in harmony with all cement types.

#### Area of Use

All kinds of concrete produced for the following areas of use used in additives;

- Ready mixed concrete production (with or without pump)
- Self-compacting concrete production
- Production of concrete that can easily set to densely reinforced concrete elements
- Production of various types of concrete such as reinforced, unreinforced, light or normal concrete
- High performance concrete production

# **Packing**

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container
- Bulk

# Storage and Shelf Life

Must be stored at temperatures between +5°C and +35°C. Consume the product using the bottom valve. Under proper storing conditions, the product's shelf life is 24 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

# **Safety Measures**

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Safety Data Sheet (SDS) should be read for detailed information.

Responsibility: The information given in this technical data sheet is based on the applications carried out in our field of production and latest technological developments. YAPICHEM KİMYA SAN. A.Ş. is only responsible for the quality of product. YAPICHEM KİMYA SAN. A.Ş. cannot be responsible for the results due to the wrong use of the product and/or apart from the written recommendations regarding the area of use and application method. This technical data sheet makes the prior issues void.