**Multi-range water reducer - High SCM replacement ratio**

- **Features**

  CHRYSO®EnviroMix® 159 is a high performance chemical admixture using proprietary polycarboxylate technology combined with innovative chemical engineering to provide the means to produce high performance concrete offering normal to accelerated setting characteristics, improved workability & finishability and improved strength development properties.

  CHRYSO®EnviroMix® 159 is manufactured under rigid quality control standards to provide uniform, reliable results.

- **Benefits**
  - Allows better utilization of mixes incorporating high volumes of posolsans such as fly ash
  - Provides increased slump and flowability without increased water content
  - Proprietary finishing aid improves workability and finishability
  - Hydration catalysts accelerate concrete set and boosts early strength
  - Improves concrete quality by reducing the water-cement ratio for a given degree of workability
  - Reduces cracking and shrinkage
  - Improves concrete chemical resistance and durability
  - High SCM usage ratios contributes to the protection of our environment (Cf. reduction of CO₂ emissions encouraged by LEED directives)
  - Improves cementitious material performance (more psi/lb)

- **Areas of Application**

  CHRYSO®EnviroMix® 159 is recommended for all concrete mixes where significant water reduction, improved cementitious material performance (more psi/lb), normal to accelerated set times and enhanced finishing characteristics are desirable.

  CHRYSO®EnviroMix® 159 is especially effective in improving the performance of concrete mixes containing high volumes of fly ash and other pozzolans.

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**Example Concrete Strength Gain**

40% fly ash, 60% cement + EnviroMix®

<table>
<thead>
<tr>
<th>1 day</th>
<th>3 days</th>
<th>7 days</th>
<th>14 days</th>
<th>28 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1130</td>
<td>1840</td>
<td>3330</td>
<td>3830</td>
<td>4680</td>
</tr>
</tbody>
</table>

CHRYSO

www.chryso.com
**Description:**

**Characteristics:**
- Physical state: liquid
- Color: green to blue shade
- Density: 1.18 ± 0.020 g/cc
- pH: 8.5 ± 2.0
- Cl⁻ ion content: Nil

**Compatibility**

**CHRYSO®EnviroMix® 159** is compatible with all types of Portland cement, class C and F fly ash, slag, microsilica, calcium chloride, fibers and approved air entraining admixtures.

**CHRYSO®EnviroMix® 159** can be used in all white, colored, and architectural concrete. For best results, each admixture must be dispensed separately into the concrete mix.

**Precaution:**

**CHRYSO®EnviroMix® 159** may freeze at temperatures below 35°F (2°C). Although freezing does not harm **CHRYSO®EnviroMix® 159**, precautions should be taken to protect it from freezing.

If **CHRYSO®EnviroMix® 159** should happen to freeze, thaw and reconstitute with mechanical agitation.

Do Not Use Pressurized Air For Agitation.

**Shelf life:** 9 months.

**Safety:**

**CHRYSO®EnviroMix® 159** is not considered dangerous to handle. Please refer to the material safety data sheet for additional information.

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**Dosage**

**CHRYSO®EnviroMix® 159** is recommended for use at a dosage rate of 3 to 14 fluid ounces per 100 pounds (195 to 910 ml per 100 kg) of cement for a Type A and 12 to 20 fluid ounces per 100 pounds (780 to 1304 ml per 100 kg) of cement for a Type F.

Because local job conditions vary, please contact your local Chryso sales representative for further assistance if using outside recommended dosage ranges.

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**About CHRYSO:**

CHRYSO is a subsidiary of the multi-billion dollar specialty construction chemicals Group, Materis.

Worldwide leader for Concrete and Cement additives, CHRYSO has been servicing the construction industry for over half a century with outstanding innovation and service.

As a result, CHRYSO’s name and products have been associated with the most prestigious and demanding construction projects worldwide.

Respectful of the environment, CHRYSO continually develops and produces innovative and effective solutions for the cement and concrete industries.

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The information contained in this document is given to the best of our knowledge and is the result of extensive and controlled testing. However, it cannot under any circumstances be considered as a warranty invoking our liability in the case of misuse. Tests should be conducted before the product is used to ensure that the methods and conditions of use of the product are satisfactory. Our specialists remain at the disposal of customers if they require help with the application of the product for their specific needs.