TECHNICAL DATA SHEET

Chryso Concrete Solutions

04/03/2025

ZYLA® 640

Normal Water Reducing Admixture

DESCRIPTION

ZYLA® 640 water-reducing admixture is a proprietary formulation incorporating polycarboxylate and highly purified specialty organic chemicals. ZYLA® 640 promotes more complete hydration of Portland cement and has minimal effect on concrete air entrainment.
The ZYLA® product line of water reducers is specially formulated to have a synergistic effect with polycarboxylate-based mid-range and high-range water reducers that improve flat-work finishability.

This product contains no intentionally added chloride and as such is essentially chloride free. It is manufactured under rigid controls that provide uniform, predictable performance. ZYLA® 640 is supplied as a light brown, low viscosity liquid, and is ready-to-use as received. ZYLA® 640 is supplied as a light brown, low viscosity liquid, and is ready-to-use as received. One gallon weighs approximately 9.1 lbs (1.1 kg/L).

ADVANTAGES

- No impact on concrete air content
- Better control of water reduction and setting times as compared to traditional lignin-based water reducers
- Synergistic performance of polycarboxylate-based mid-range and high-range water reducers, which includes water reduction and concrete strength and air control
- In the hardened state, improves the compressive and flexural strengths at all ages of concrete versus traditional lignin-based water reducers

FIELDS OF APPLICATION

- ZYLA® 640 is suitable for normal weight and light weight concrete in ready-mix, precast and prestressed applications

Method of Use

Dosage

- The addition rate range of 3 to 5 fl oz/100 lbs (195 to 325 mL/100 kg) of cement or cementitious is typical for most applications. However, addition rates of 2 to 7 fl oz/100 lbs (130 to 455 mL/100 kg) of cement or cementitious may be used if local testing shows acceptable performance. Pretesting is required to determine the appropriate addition rate for desired performance. The optimum addition rate depends on the other concrete mixture components, job conditions, and desired performance characteristics.
- The admixture shall be delivered as a ready-to-use liquid product and shall require no mixing at the batching plant or job site.

Additional Usage Recommandations

- ZYLA® 640 is used to produce concrete mixes with lower water content (typically 3% to 10% reduction), greater plasticity and higher compressive strengths. ZYLA® 640 is suitable for normal weight and light weight concrete in ready-mix, precast and prestressed applications.
- The unique chemistry of ZYLA® 640 positively impacts the finishability of concrete by providing a creamier and more homogenous texture, with more uniform bleed rate relative to traditional lignin-based water reducers. The influence of ZYLA® 640 on the finishability of lean mixes has been particularly noticeable. Floating and troweling, by machine or hand, imparts a smooth, close tolerance surface.

Equipment

chryso SAINT-GOBAIN

ZYLA® 640

Normal Water Reducing Admixture

- A complete line of accurate, automatic dispensing equipment is available. ZYLA® 640 may be introduced to the mix through the water holding tank discharge line. The ZYLA product line is formulated to be free of sediment.

Complimentary Products

- ZYLA® 640 is compatible with most admixtures as long as they are added separately to the concrete mix, usually through the water holding tank discharge line. In general, it is recommended that ZYLA® 640 be added to the concrete mix near the end of the batch sequence for optimum performance. Different sequencing may be used if local testing shows better performance. Please see Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations.
- Pretesting of the concrete mix should be performed before use, as conditions and materials change in order to assure compatibility, and to optimize dosage rates, addition times in the batch sequencing and concrete performance. For concrete that requires air entrainment, the use of an ASTM C260 air-entraining agent (such as DARAVAIR® or DAREX® product lines) is recommended to provide suitable air void parameters for freeze-thaw resistance.

CHARACTERISTICS

Product Nature	Liquid
Color	Brown
Shelf life	9 months
Cl^- Ions content	< 0,100 %
Specific gravity (25°C) in g/ml	1,084
pH (25°C)	8,80

PACKAGING

- Bulk
- 1000L Tote (275 gallons)
- 210 L (55 Gallons) Drum

ADDITIONAL CERTIFICATIONS & MARKINGS

- Concrete shall be designed in accordance with *Standard Recommended Practice for Selecting Proportions for Concrete*, ACI 211.
- The admixture shall not contain calcium chloride as a functional ingredient.
- ZYLA® 640 will not promote corrosion of reinforcing steel embedded in concrete.
- It shall be used in strict accordance with the manufacturers' recommendations.
- The admixture shall comply with ASTM Designation C494, Type A and D water-reducing admixtures.
- Certification of compliance shall be made available on request.

PRECAUTIONS

- ZYLA® 640 will freeze at about 28°F (-2°C), but will be completely uniform after thawing and thorough agitation.

SAFETY

Prior to any use, please read carefully the Safety data Sheet.

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