

HiperLon™



**Innovative
Concrete
Fiber**



FEATURES	<ul style="list-style-type: none"> • Enhances performance & durability • Provides secondary reinforcement • True replacement for rebar • Alkali resistant & non-corrosive • Insoluble in water • Mixes well in concrete • High impact resistance • Excellent finishability 	
BENEFITS	<p>HiperLon™ fiber added to concrete mechanically locks in the fresh concrete matrix and adds flexural strength. HiperLon™ provides secondary reinforcement and rebar replacement without the worry of corrosion. With HiperLon™, concrete is quicker to place, cuts labor costs, is highly impact resistant and improves your Bottom Line.</p>	
APPLICATIONS	<p>HiperLon™ characteristics lend itself to a variety of concrete applications including: slab-on-grade, precast concrete, shot-crete, paving, corrosive area placements and specialty concrete applications.</p>	
DOSAGE RATES	<p>For general applications such as slab-on-grade, a standard dosage of 5 lbs. /yd³ is recommended. Other fibers require higher dosage rates or cannot meet requirements to achieve similar performance. For other applications, consult with your ICF representative for recommended dosages.</p>	
MIXING	<p>Follow ASTM C-94 guidelines. HiperLon™ can be added directly to the mix at the jobsite or during batching of ingredients, but not as the first ingredient and should be mixed for a minimum of 5 minutes at full mixing speed.</p>	
PACKAGING	<p>1 Carton/30 lbs. per box; 18 Cartons/Pallet; 11 Pallets/20 ft. Container. Bulk gaylords are available on request.</p>	
FINISHING	<p>There is little surface protrusion when using HiperLon™. HiperLon™ can be pumped or placed using conventional equipment and HiperLon™ can be used with most finishing techniques including power or hand troweling and broom finished concrete.</p>	
PHYSICAL PROPERTIES	<p>Material Specific Gravity (g/m³) Impact Resistance Blast Resistance Tensile Strength Acid & Alkali Resistance Color Dispersity Rate Filament Diameter (mm) Fiber Count (fiber/lb.) Fiber Length inch (mm)</p>	<p>Modified Nylon 1.15 High High 116 ksi. Excellent Off White Excellent 1.0 7500 3 inch (76mm) (see availability of other lengths)</p>



TESTING

Introduction: This document presents the summary of the laboratory testing performed by TEC on samples of concrete containing HiperLon™ fiber at different application rates. The scope of the testing was as follows:

Perform laboratory batching of concrete with and without fibers according to ASTM C 1609

- A. Flexural Strength (ASTM C 78-10)
- B. ASTM C 1609
- C. Resiliency
- D. ASTM C 1018



Summary of Test Results:

The following is a summary of the tests results:

<u>Dosage per yard/3</u>	<u>Resiliency</u>	<u>ARS/PSI</u>	<u>C1018 I10</u>
3	17.37%	227 psi	4.8
5	28.33%	364 psi	4.8
10	41.39%	512 psi	5.8
15	46.67%	630 psi	7.0
25	54.01%	725 psi	9.0

Conclusion:

Based on the test results, HiperLon™ fiber can be used at a specified dosage rates to replace welded wire mats and rebar in specified concrete placements.

All information, recommendations and advice provided by ICF Concrete regarding products and their use and application is based on ICF Concrete's experience with such products when properly stored, handled and applied under normal conditions.

ICF Concrete reserves the right to change the properties of the Hiper-Lon product without prior notice.

No offer or solicitation of sale or purchase is made under or with this information sheet