



# Innovators in Mineral Processing Technology

## Dynapoz

### Dynapoz Benefits

- Increase in compressive and flexural strength.
- Reduced permeability.
- Improved durability.
- Reduction of alkali-silica reactivity (ASR) and efflorescence.
- Improved resistance to chemical attack such as sulfates.

Christy Minerals Dynapoz is a mineral admixture for producing high performance concrete. It consists of Class N Calcined Clay Natural Pozzolan. It is designed to produce concrete with superior strength, exceptional sulfide resistance and low permeability. It also is designed to mitigate alkali silica reactivity. Typical Pozzolan replacement is five to twenty (5-20%) percent by weight.

Dynapoz is a finely ground processed clay which has been activated with temperature to form a highly reactive metakaolin. The product is manufactured under strict process controls unlike other supplementary cementitious materials which are industrial by-products. The benefits of using Dynapoz as a

cement replacement of up to 20% are many. As cement reacts with water a Calcium Silicate Hydrate (CSH), the functional binder, is formed along with Free Lime (Calcium Hydroxide). In standard concrete mixes, without the addition of supplementary cementitious materials, this free lime formed during hydration does not provide property benefit. Dynapoz reacts chemically with this free lime to produce additional Calcium Silicate Hydrates (CSH), which is the key to the enhanced properties seen.

This reaction takes place early in the hydraulic setting period and continues to occur during hydration, continuing to enhance the properties of the installed concrete.

**Sales Office** P.O. Box 159 ▶ High Hill, MO 63350 ▶ Phone: 636.585.2214 ▶ Fax: 636.585.2220

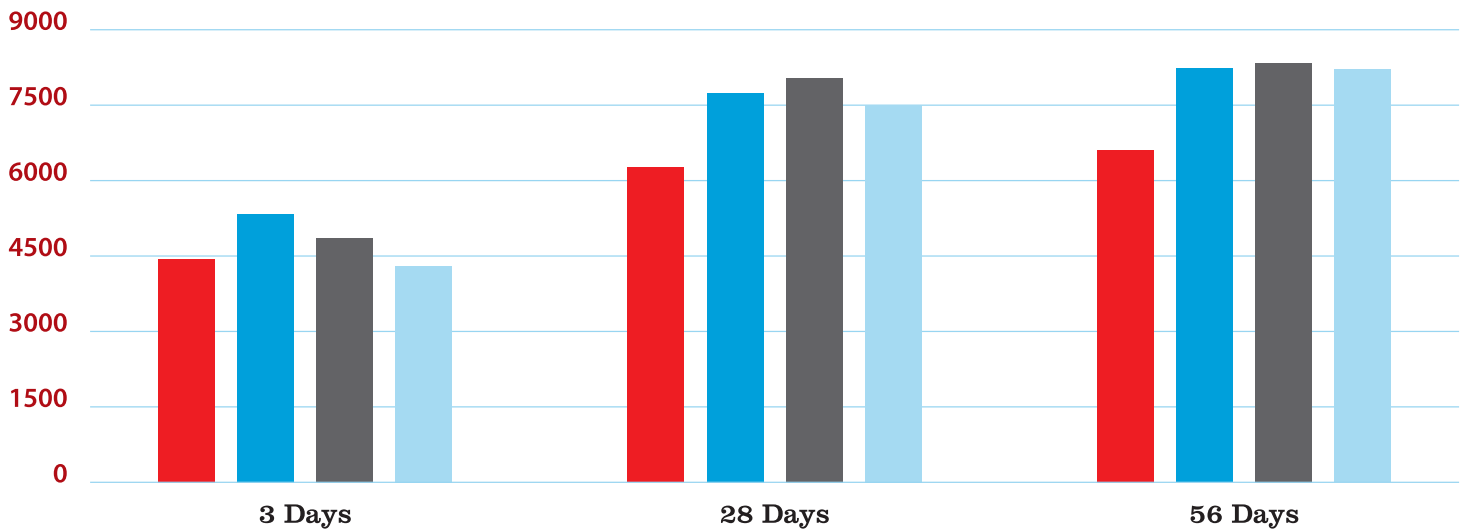
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[www.christyco.com](http://www.christyco.com)

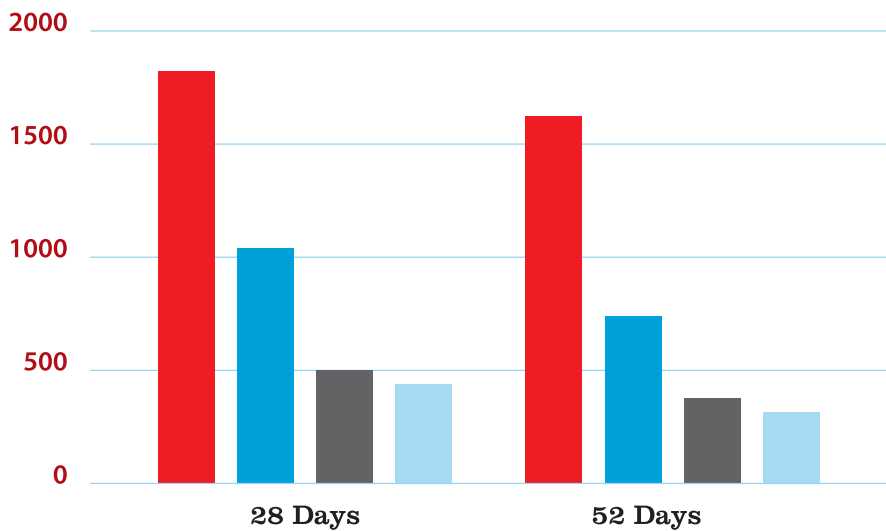
# Dynapoz

## Independent Test Results

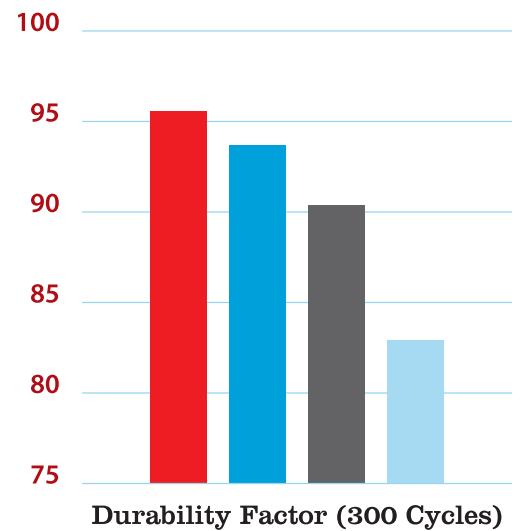
### Compressive Strength (Psi)



### Permeability (Coulombs)



### Freeze | Thaw Test



■ Control Group ■ 8% Dynapoz ■ 18% Dynapoz ■ 15% Dynapoz, 25% Slag