



# Zeeospheres™

## ceramic microspheres

### for Water Reducible Epoxy Coatings

#### Introduction

Zeeospheres™ Ceramic Microspheres have been used for many years in a variety of industrial and maintenance coatings applications, including high solids and water reducible systems. With the growing interest in water reducible coatings in recent years, Zeeospheres ceramic microspheres are finding widespread utility because they allow higher filler loading capability, lower resin demand and increased chemical resistance. They also allow lower overall viscosity when compared to common mineral fillers. Due to their spherical shape, these microspheres offer tight particle packing which contributes to improved durability, weatherability, corrosion and chemical resistance.

#### Potential Benefits

##### Higher filler loading potential

- Higher volume solids/reduced resin demand
- Higher PVC levels
- Lower VOCs
- Reduced shrinkage in high-build applications
- Potential cost reduction

##### Improved particle packing

- Reduced film permeability
- Improved corrosion resistance (via barrier effect, not chemical corrosion inhibition)

##### Inertness

- Increased chemical/corrosion resistance
- Improved weatherability
- Less likely to interact/interfere with other ingredients

#### Key Properties

- Improved chemical and corrosion resistance
- Longer service life prior to recoating
- Improved salt spray performance

#### Processing Information

Zeeospheres™ Ceramic Microspheres are best dispersed by using sand, ball and roller mills. For optimal dispersion, ceramic microspheres should be added to the grind stage along with pigments and other filler materials. Use of dispersant will aid in the dispersion of these products.

#### Suggested Starting Formulations

Numerous suppliers of water reducible resins and other key ingredient manufacturers have confirmed the benefits of ceramic microspheres, and are recommending them in their own suggested starting formulas. These formulas offer a convenient starting point for formulating with ceramic microspheres in these systems.

#### Product Safety and Handling

Please read and follow the precautions and directions for use on the product label and on Material Safety Data Sheets available from Zeeospheres Ceramics, LLC, (985) 532-2541, [www.zeeospheres.com](http://www.zeeospheres.com).

