



# DRYWALL / WALLBOARD, GYPSUM

Ingredients for Plaster, Render Finishes, Stucco, Putty, and Joint-Compounds

# ACCELERATORS

### Potassium Sulfate

Potassium sulfate speeds up the setting and hardening of the gypsum plaster, reducing the drying time and improving the strength and durability of the drywall. Potassium sulfate also acts as a fire retardant, as it releases water vapor when exposed to high temperatures, slowing down the combustion process. Potassium sulfate is a safe and effective additive that can enhance the performance and quality of various drywall products.

# DEFOAMERS

## Triisobutyl Phosphate (TIBP)

Triisobutyl phosphate (TIBP) is a clear, colorless liquid that is derived from isobutyl alcohol and phosphoric acid. It is used as a defoamer and penetrant in gypsum-based products, such as drywall and plaster. Triisobutyl phosphate reduces the formation and persistence of foam in the gypsum slurry, which can cause defects and cracks in the final product. It also improves the wetting and spreading of the gypsum on the substrate, resulting in a smooth and uniform finish.

# DISPERSANTS/ WETTING AGENTS

### Melamine Sulfonate

A dispersant in gypsum based materials, melamine sulfonate allows for high flow and water reduction. Suitable for use both drywall and joint compounds. Due to it's light color, melamine sulfonate can be used in white and colored formulations.

## Naphthalene Sulfonate

Naphthalene sulfonate is a type of surfactant that is derived from naphthalene, a hydrocarbon compound found in coal tar. Naphthalene sulfonate is widely used as a wetting agent in drywall, helping to reduce the surface tension of water, allowing it to penetrate and moisten the gypsum particles more effectively. This improves the workability and adhesion of the drywall, as well as the drying time and strength.

## Polycarboxylates – CONTROL™ PCE

CONTROL<sup>™</sup> PCE are the latest generation additives, widely used as a rheology modifier in gypsum and drywall. CONTROL<sup>™</sup> improve the performance and quality of gypsum and drywall by reducing the water demand and increasing the fluidity of the gypsum slurry. They also help to control the setting and hardening of the gypsum plaster, resulting in a smooth and uniform finish.

# FOAMING AGENTS

### Air Entrainment - UNIMIX™ (AE)

UNIMIX<sup>TM</sup> (AE) powder additives for air-entrainment and foam generation. Foaming agents can play a major role in reducing the density of the drywall (gypsum board), which allows for ease of handling, thermal insulation, sound proofing, shorter drying times and savings in raw material costs.

# FUNCTIONAL FILLERS

### E-Glass

E-glass chopped strand and roving fibers are a type of glass fiber reinforcement that are made from electrically melted glass. The main characteristics of e-glass fibers are high strength, stiffness, and heat resistance. Widely used as a filler and reinforcement in gypsum and drywall, E-glass fibers improve the performance and quality of gypsum and drywall by increasing their tensile and flexural strength, reducing their weight and shrinkage, and enhancing their fire resistance and sound insulation.

### Glass Spheres – MICRO™ (EFGS)

MICRO<sup>™</sup> (EFGS) Expanded Foam Glass Spheres are tiny, white spherical particles of glass that have a hollow core and a thin wall. MICRO<sup>™</sup> (EFGS) spheres improve the performance and quality of gypsum and drywall by reducing their weight and shrinkage, increasing their fire resistance and acoustic insulation, and preventing cracking and sagging.

### Microspheres - MICRO<sup>™</sup> (CM) Ceramic Microspheres

MICRO<sup>™</sup> (CM) Ceramic Microspheres, also known as cenospheres, are thin-walled hollow ceramic spheres with a high crush strength, that can be used to modify rheology, reduce weight and shrinkage and improve thermal insulation in gypsum and drywall.



### RETARDERS

#### **Tartaric Acid**

Tartaric acid is a strong retarder in gypsum-based systems. The L+ variety with anti-cake, is highly soluble and free flowing, allowing for easy dispersion in small dosages throughout the finished gypsum mix. The DL variant is also available in granular form.

### SPECIALTY ADDITIVES

#### METHOD<sup>™</sup> Cellulose Ethers (MC, HEC, HPMC)

METHOD<sup>™</sup> range of cellulose ethers include methyl cellulose (MCs), hydroxy ethyl cellulose (HECs) and hydroxy propyl methyl cellulose (HPMCs). Cellulose ethers help retain moisture in the gypsum slurry, preventing it from drying out too quickly. In addition, METHOD<sup>™</sup> Cellulose Ethers enhance the adhesion of the gypsum plaster to various substrate and modify the rheology to allow for easier mixing, spreading and application.

#### VINNSPERSE<sup>™</sup> Dispersible Polymer Powder (RDP)

VINNSPERSE™ Ethylene Vinyl Acetate (EVA) based dispersible polymer powders are easily dispersed in water and form stable emulsions. RDPs can improve adhesion, flexural strength and workability of modified gypsum compounds.

#### Sodium Trimetaphosphate (STMP)

STMP sodium trimetaphosphate is a white, crystalline salt used as an additive in gypsum and wallboard production. STMP sodium trimetaphosphate acts as a dispersant and a retarder, preventing the gypsum particles from clumping or settling, and slowing down the hardening process. This improves the workability and adhesion of the gypsum slurry, as well as the drying time and strength of the wallboard.



ASG Chemical Holdings, LLC • Bulk Chemicals and Specialty Performance Materials • www.asgchemie.com 2603 NW 13th St. #231 Gainesville, FL 32609 • Main : 352.432.1481 • Fax : 352.430.7442 • Toll Free : 1.833.ASG.CHEM (274-2436) ©2024 All Rights Reserved. ASG Chemie is a trademark of ASG Chemical Holdings, LLC.