

# Plasters

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Plaster and gypsum cements are incredibly versatile in their applications - from elegant plaster lamps to molds for slip casting and dies for pressing. Soft, hard, permeable, durable, hobby or industrial, the various types of plaster offer a multitude of uses. This page lists the most commonly used plaster and gypsum cements, but the list of specialized products available for metal casting, tooling, dental plasters, etc. is lengthy, so if you don't see what you need in this section, or if you need additional technical data on the gypsum materials which you are currently using, call a Laguna plaster specialist.

## **INDUSTRIAL PLASTERS & GYPSUM CEMENTS FOR THE CERAMIC INDUSTRY**

### **U.S. Gypsum Products**

#### **REGULAR POTTERY**

General purpose product recommended for most slip casting applications in the ceramic industry.

#### **NO. 1 POTTERY**

Formulated to provide stronger, longer-lasting working molds than Regular Pottery Plaster. Slightly whiter than Parallel Pottery Plaster.

#### **PARALLEL POTTERY**

For sanitary and dinnerware casting or jiggering. Manufactured in California, this 1996 formulation is highly uniform to USG No. 1 Pottery Plaster produced in Oklahoma.

#### **DURAMOLD POTTERY**

Compared to No. 1 Pottery Plaster: 10% longer mold life; 28% higher wet compressive strength; 66% stronger dry compressive strength; makes more durable working molds, resulting in lower costs per unit cast.

#### **PURITAN POTTERY**

Slightly denser, longer-wearing mold material. Recommended for jiggering applications.

#### **ULTRACAL 30**

A low-absorption gypsum cement for case molds. Specially made for close tolerance tooling; provides excellent hardness, accuracy and freedom from efflorescence.

#### **HYDROCAL A-11**

High strength, gypsum cement having very low setting expansion. Adapts to production on hard, strong, tough models of uniform and stable dimensional accuracy. Used for production of master models and Keller duplicating machines. Stiffening rate very rapid after setting action begins. Recommend for slurry casting technique.

#### **HYDROCAL B-11**

Similar to Hydrocal A-11 cement in setting expansion and dimensional accuracy, but with slightly less strength. Greater plasticity and more gradual setting action make it more suitable for built-up or template-formed models.

### **HYDRO-STONE**

Especially suitable where high strength and resistance to wear are necessary. Used in high-quality art and novelty castings, molds, figurines, molding material, anchoring material, density fill applications, lamp bases, and die production. Works well in most mold materials, especially flexible molds. Expands about two times greater than Hydrocal A-11.

### **CERAMICAL**

Low consistency, smooth-wearing mold material for use in ram pressing clay ware. Characteristics: low absorption, high strength, ability to purge easily, resistance to abrasion and wear.

## **INDUSTRIAL PLASTERS & GYPSUM CEMENTS FOR ART & CASTING APPLICATIONS**

### **U.S. Gypsum Products**

#### **REGULAR CASTING - 20 & 30 MINUTE**

(Also referred to as **Moulding Plaster**.) Good utility plaster where expansion control, hardness and strength are not of major importance.

#### **WHITE ART - 20 & 30 MINUTE**

Similar in working properties to Regular Casting Plaster, except contains a surface hardening agent which minimizes paint absorption.

#### **TUF CAL - 20 & 30 MINUTE**

Unique blend of polymer-modified, fibered gypsum plaster and Hydrocal Gypsum Cement. Engineered to provide higher green strength, greater chip and impact resistance than Industrial Plaster-PC, White Art or No.1 Casting plasters.

#### **HYDROCAL WHITE**

A basic Hydrocal cement with a use consistency of 45 lbs. of water per 100 lbs. of plaster. Can be carved or added to. Setting expansion and compressive strength about twice that of Moulding, Casting or Pottery Plaster.

#### **HYDROCAL-FGR 95**

Sets fast, develops high strength and permits fabrication of strong, resilient glass-reinforced gypsum products that are fire-resistant, adaptable to deep patterns, accept most coatings, help overcome fire code problems of many plastics, and cost about 2/3 less than filled polyesters.

### **HYDRO-STONE**

Especially suitable where high strength and resistance to wear are necessary. Used in high quality art and novelty castings, molds, figurines, modeling material, anchoring material, density fill applications, lamp bases, and die production. Works well in most mold materials, especially flexible molds. Expands about two times greater than Hydrocal A-11.

### **HYDRO-STONE TB**

Resists yellowing when exposed to sunlight. This modified Hydro-Stone formulation minimizes color variations. Used in high quality figurines or wherever coloring is a factor. Also may be used for density fill and simulated stone products.

**DRYSTONE**

This casting media is a fast-setting gypsum cement that provides strong, durable casts without the need for dryers. Drystone provides an environmentally sound alternative to resin-based products and casts with reduced breakage compared to conventional plaster and gypsum cement products. Specify solid or hollow application.

**GARDENCAST**

New white gypsum cement specially designed for free-standing, solid-cast, outdoor statuary. Rabbits? Turtles? Angels? They never looked so good. Uniform color and texture take paint well or look great naturally white.

**SPECIALTY GYPSUM CEMENTS****U.S. Gypsum Products****FASTCAST/DURACAL**

A fast-setting, high early-strength cement with a positive expansion. Initially designed for patching highways, bridges, etc., has become popular for production of decorative exterior figurines.

**HYDROPERM**

Permeable metal casting product formulated with Hydrocal gypsum cement. Suitable for non-ferrous casting because of smooth mold surface, carvability and controllable permeability.