

USG ULTIMATE DRYSTONE™ CASTING MEDIA SOUTHARD, OK

DESCRIPTION

USG Ultimate Drystone™ Casting Media is a unique product that requires no oven drying – you can cast, paint, package and ship in one day. USG Ultimate Drystone Casting Media offers excellent duplication of fine detail, high compressive strength and a high density that provides a quality feel. Ideal for solid cast pieces, USG Ultimate Drystone Casting Media is formulated to increase chip resistance and is an excellent alternative to polyester resin.

TYPICAL PHYSICAL PROPERTIES

Normal Consistency	18 – 20 lbs. water/100 lbs. product (8.1 – 9.1 kg water/45.4 kg product)
Hand Mix Vicat Set, Target	24 – 30 minutes
Machine Mix Vicat Set, Target	10 – 15 minutes
Demolding Time	15 – 25 minutes after set
Compressive Strength, One Hour After Set	7000 psi (48.2 MPa)
Compressive Strength, Dry	16,000 psi (110.3 MPa)
Density, Dry	128.0 lbs./cu. ft. (2050 kg/m ³)
% Maximum Expansion (3 hour)	0.275%
% Absorption 24-Hour Immersed	2.5%

NOTE The *Typical Physical Properties* in the above table were achieved under controlled laboratory conditions with freshly produced material, results may vary. Other set times may be available; call your USG Sales Representative for more information.

MIXING INSTRUCTIONS

MIX PREPARATION

Use potable water at temperatures between 70 °F (21 °C) and 100 °F (38 °C). Because variations in slurry (USG Ultimate Drystone Casting Media and water mixture) temperature produce variations in set time, it is important to keep both the USG Ultimate Drystone Casting Media and water in a stable temperature environment prior to use. The higher the temperature of the slurry, the shorter the set time. Conversely, the lower the temperature of the slurry, the longer the set time.

Weigh both the USG Ultimate Drystone Casting Media and the water prior to use for each mix. The water-to-USG Ultimate Drystone Casting Media ratio is critical because it governs the strength and the density of the final cast.

MIXING

Sift or strew USG Ultimate Drystone Casting Media into the water slowly and evenly; start mixing immediately.

Mixing the plaster slurry is one of the most important steps in producing plaster molds with maximum strength, absorption, hardness and other important properties.

IMPORTANT – USG Ultimate Drystone Casting Media must be mechanically mixed with a batch process. Proper blade and bucket dimensions are important for obtaining the best batch mix (See USG IG503 *Plaster Mixing Procedures* for details).

Longer mixing times result in higher mold strength and shorter set times.

POURING

To prevent air entrainment and provide a uniform, smooth surface, careful pouring of USG Ultimate Drystone Casting Media slurry is necessary. Agitation of the filled mold is a further step used to prevent air at or near the mold surface. Whenever possible, USG Ultimate Drystone Casting Media slurry should be poured carefully in the deepest area so that the slurry flows evenly across the surface of the case mold.

Pouring a large amount of slurry directly on the face of the case mold may result in slight densification of the USG Ultimate Drystone Casting Media mold at the point where it strikes the surface of the case. This produces a hard spot, giving uneven absorption.

USG Ultimate Drystone Casting Media can be used with most mold materials such as silicone, latex or urethane-type molds.

To prepare the mold, make sure it is clean, then dip the mold or spray it with a suitable mold rinse. Using a steady rate, pour the USG Ultimate Drystone Casting Media slurry into one corner of the mold or into the lowest point and allow the slurry to rise and seek its own level. Continue pouring until the mold is full. To minimize air entrainment, mechanically vibrate or shake the mold or the surface onto which the mold is placed. Do not vibrate for more than 30 seconds.

Demold USG Ultimate Drystone Casting Media after it reaches peak heat (approximately 30 minutes after set).

DRYING

All casts should be air dried as quickly as is safely possible after manufacture so that maximum physical properties can develop. Dry to a constant weight. To aid in the drying and cooling down process, remove the hardened USG Ultimate Drystone Casting Media cast from the mold, or loosen the mold walls and allow air to circulate the cast.

FINISHING

If trimming is required, do so immediately after demolding. USG Ultimate Drystone Casting Media products can be decorated approximately 2-4 hours after set time.

STORAGE AND USE

When properly used, USG Ultimate Drystone Casting Media is easy to work with and complies with the federal Labeling of Hazardous Art Materials Act, 12 U.S.C. Section 1277. Keep indoors at temperatures between 65 °F - 75 °F (18 °C - 24 °C) and 45% - 55% RH. Do not stack more than two pallets high. Keep from drafts. Rotate stock. USG Ultimate Drystone Casting Media should be used within six months of the manufacturing date located on the package. Always follow handling and use directions and safety warnings on the package.

PRODUCT INFORMATION

See usg.com for the most up-to-date product information.

CAUTION

When mixed with water, this material hardens and becomes very hot sometimes quickly. DO NOT attempt to make a cast enclosing any part of the body using this material. Dust from mixing may cause irritation to eyes, skin, nose, throat and upper respiratory tract. Use only in a well-ventilated area, wear a NIOSH/MSHA-approved respirator. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If on skin: Wash with plenty of water. If swallowed and/or irritation persists, call physician. For more information call Product Safety: 800-507-8899 or see the SDS at usg.com

KEEP OUT OF REACH OF CHILDREN.

TRADEMARKS

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NOTICE

We shall not be liable for incidental or consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

SAFETY FIRST!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

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