Rescor Castable Ceramics

Use to 4000°F

Rapid in House Processing Produces Complex Ceramic Parts

Now, Alumina, Silicon Carbide, Zirconium Oxide, Fused Silica or Insulating Ceramic Foam parts, tubes, prototypes, crucibles, etc. can be made in minutes using a completely in house process. Just mix and pour into any non-asorbent mold.

Cat. No. Features Max. Temp. °F Base	740 Insulating Foam 2300 Al ₂ O ₃ -SiO ₂	750 Shock Resistant 2700 SiO ₂	760 Ultra Temp. 4000 ZrO ₂	770 Corrosion Resistance 2700 SiC	780 General Purpose 3000 Al ₂ O ₃	RTC-60 High Purity 3250 Al ₂ O ₃
Properties			BB.	0		
Density (# / ft³)	40	110	250	145	180	175
(in ³ /10# kit)	432	157	69	119	96	98
Shrinkage (as cast) %	0.50	NIL	NIL	NIL	NIL	NIL
(@ 1000°F) %	1.00	1.30	1.00	1.50	1.00	1.25
Comp. Strength (psi)	1,500	6,000	4,000	6,000	6,000	2500
Modules of Rupture (psi)	900	1,500	1,200	1,500	1,800	1000
Therm. Exp. (x 10 ⁻⁶ / °F)	4.5	0.3	5.6	4.5	4	4
Therm. Conductivity*	1	4	6.5	30	10	10
Dielectric Strength (volts / mil)	100	100	N.A.	N.A.	200	175
Volume Resistance (ohm-cm)	10°	10 ⁹	N.A.	N.A.	10 ⁹	10 ¹⁰
Moisture Resistance	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Color	Tan	White	Tan	Black	White	White
Mix Ratio (Powder/Liquid)	100/62	100/28	100/18	100/24	100/24	100/10
10 lb., 50 lb. Kits, 100 lb. kits						

*BTU-in/Hr-°F-Sq. Ft.

Rescor Castable Ceramics

Just Mix and Pour

Replicast hardens overnight to produce highly detailed, ceramic parts usable to 4000°F. Parts as small as an inch to parts measuring over 6 ft. in length (and over 2000 pounds in weight) are easy to make. Rescor castable ceramics offer excellent resistance to high temperature, thermal shock, molten metals, oxidizing and reducing atmospheres, erosion, most acids and alkalis, etc.

They are ideal for use in applications requiring excellent accuracy and dimensional stability.

Applications include: forming operations, brazing dies and fixtures, liquid metal contacts, etc.

Users Report:

Rescor 740 was used to cast 24" diameter x 2.5" high cylindrical rings in order to electrically and thermally insulate flanges in a casting furnace. Rescor 740 easily cast 2000 lb. molds (6 ft. in length) to be used for forming and curing composite materials.

Rescor 780 molds were used for quick tooling when casting white metal bumper parts for automotive applications.

Rescor Castable Ceramics will satisfy many advanced requirements for "in house" fabrication of high strength parts and prototypes. They are the ideal choice for production, research and development applications.

A 20 minute demonstration of the complete mold making and casting process is now available on CD.

CD 700-CD-1

Replicast 101 Rubber Mold Making Compound

Specially designed for use with Rescor Castable Ceramics



Pouring Replicast Around the Model



Replicast Mold Ready to Make Castings

Replicast 101 will produce low cost, exact, highly detailed, precision flexible molds without special tools or equipment. Replicast's exceptional low viscosity will pick up the finest details without bubbles or flaws. Just mix and pour. Cures at room temperature. No need for vacuum degassing or special processing. Shrinkage is negligible.

Replicast 101 can be used with all of Cotronics' Ceramic Materials, as well as with conventional Epoxies, Gypsum, Urethane, and Polyester Resins.

Gallon kit

Replicast 101MR

101MR Spray on, general purpose, non-stick, mold release. Use for all development and production applications. Compatible with Replicast liquid rubber, epoxies, castable ceramics. A thin mist is best for most uses. 101MR is non-flammable and does not contain chlorinated solvents or fluorocarbons.

12 oz. Spray Can

Case Pack 12-12 oz. Spray Cans