

PRODUCT

ULTRA-TEK 93-UL

**ULTRA LOW CEMENT, SELF FLOWING CASTABLE,
PUMP MIX, SHOTCRETE**

REFRACTORIES

TECHNICAL DATA

PHYSICAL PROPERTIES

Maximum Service Temperature	3250°F
Lbs. Required Dry Mix per Cu. Ft.	195 lbs.
% Water by Weight Required for Casting	4 - 5% *
Bulk Density After Drying	198 lbs./cu.ft.

Modulus of Rupture

After Drying	1500 - 2000 psi
At 1500°F	2100 - 3000 psi
At 2550°F	800 - 1100 psi
At 2750°F	200 - 500 psi

<u>Cold Crushing Strength After Drying</u>	9000 - 14000 psi
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Permanent Linear Change

After 1500°F	0.0 to -0.5%
After 2550°F	+0.5 to +1.0%
After 2750°F	0.0 to +0.5%

CHEMICAL ANALYSIS

Silica	[SiO ₂]	5.5%
Alumina	[Al ₂ O ₃]	92.5%
Iron Oxide	[Fe ₂ O ₃]	0.1%
Lime	[CaO]	0.9%
Titania	[TiO ₂]	0.4%

NOTE: All data subject to reasonable deviation and should not be used for specification purposes.
All data based on self flow placement, higher strengths can be obtained with less water and vibration casting.

* SEE REVERSE SIDE FOR DETAILS

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MT. SAVAGE

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Mt. Savage ULTRA-TEK, ULTRA-TEK UL and ULTRA-TEK NC Castables are formulated for vibration casting, self-flow casting, pumping, and shotcrete application. The water ranges on the data sheets indicate lower amounts for vibration casting and maximum strengths and higher amounts for pumping and shotcrete installation. Specify your application for additional information and to obtain ULTRA-SET Accelerator for shotcrete installation. Shotcrete installations should be performed by qualified contractors only.

“UL” or Ultra Low Cements have higher intermediate temperature strengths and “NC” or No Cements have increased high temperature strengths.

All data is based on averages of laboratory testing and may vary under field installation conditions.

All Low Cement materials require careful dry out. Please consult your Mt. Savage representative for details.

Low Cement Castables setting times are temperature sensitive and will require longer setting times in cooler conditions under 70°F. Preferred mixing temperatures are between 70°F and 90°F. Casting of low cement materials below 50°F is not recommended.

Low Cement Castables have an effective shelf life of approximately 6 months. Older materials will have significantly increased set times.