

EZ CAST® 2700	is a general purpose castable designed for applications up to 2700°F. Its high strength and ability to be cast, pumped, or poured (self leveling) make it the ideal choice for any number of applications where access is limited or obstructions make work difficult. It is particularly effective in applications where destructive gases and atmospheres or excessive wear shorten refractory life. For shotcreting, EZ³ 2700 is suggested.
EZ CAST® 2800	is designed for applications up to 2800°F. This product has tested well for resistance to CO (carbon monoxide) disintegration encountered in coke ovens and blast furnaces. For shotcreting, EZ³ 2800 is suggested.
EZ CAST® 40-AL	is non-wetting to molten aluminum up to 2200°F but can be used to 2500°F when its non-wetting characteristics are not required. It can be vibration cast or self-flow cast. For shotcreting, FURNA³ 40 is suggested.
EZ³ LO-ERODE®	is a shotcretable, versatile abrasion resistant conventional castable. It can be vibration cast or poured in addition to shotcreted and pumped, and can be used at temperatures up to 2600°F. This product will meet the tough property standards at 1500°F required by the hydrocarbon processing industry.
FURN-A-RAM™	is designed for general operating conditions where normal service is encountered. The product combines the benefits of coarse and fine aggregate to provide a balanced mix for a wide variety of applications. The product is supplied dry and is mixed on the jobsite with 8% to 10% water for a ramming consistency. (This brand was developed for aluminum subhearths.) This product can also be used as a castable by mixing with 15% to 20% water.
FURNAS CRETE®	is designed for a higher operating temperature where normal service is encountered. This castable combines the benefits of both fine and coarse aggregate to provide a balanced mix for a wide variety of applications. FURNAS CRETE can also be rammed utilizing 8% - 10% water. FURNAS CRETE COARSE is a coarse grained version of FURNAS CRETE with improved resistance to hot load and thermal shock as well as increased strength and volume stability.
HI-STRENGTH™ 25	is a 2500°F castable designed to resist abrasion and erosion at moderate temperatures. It has excellent thermal shock resistance and is widely used as a refractory lining and maintenance material for many different applications. The mix is also ideal for two-component linings. HI-STRENGTH 25 can be troweled, cast or gunned.
HI-STRENGTH™ 26-LI	was developed to meet the demands for a low iron 2600°F castable in the 125 lbs/ft ³ range. The lower iron content results in better resistance to reducing atmospheres. It has excellent strength throughout its temperature range and very good abrasion and erosion resistance. HI-STRENGTH 26-LI can be cast, troweled or gunned.
HI-STRENGTH™ 28-LI	is used for general steel mill applications where destructive gases and atmospheres or excessive wear affect refractory life. It produces a tough, monolithic structure with negligible shrinkage. It has good refractoriness with a 2800°F use limit. A casting or ramming consistency may be obtained by control of water during mixing.
HI-STRENGTH™ COARSE 23	offers a use limit up to 2350°F. It is recommended for general construction and large, thick linings.
HI-STRENGTH™ COARSE 25	is a low iron castable for service up to 2550°F, suitable for reducing conditions. It is a tough castable with excellent abrasion resistance and high strengths.
HI-STRENGTH™ COARSE 27	The characteristics of this product are similar to HI-STRENGTH COARSE 23 , but with a higher use limit of 2700°F. It is used in preference to HI-STRENGTH COARSE 23 for linings of units subjected to reducing conditions, or where a lower iron content is desirable.
LADLELINE™	is an economical, 3000°F, low-iron, 56% alumina castable. It is volume stable with good strength throughout its temperature range. Although originally designed for casting ladles, LADLELINE has proven to be a good, general-purpose, high temperature castable for a wide variety of applications.
PUROCAST® N	is a 3000°F 60% alumina castable. It is a low iron, high alumina material capable of withstanding reducing or hydrogen atmospheres, carbon deposition, and high sulfur fuels. It has good volume stability, excellent resistance to spalling, and low thermal conductivity. The high alumina content and slag resistance of PUROCAST N castable have made it especially effective when in contact with molten metal and slags.
PUROCRETE®	is a 3200°F service limit, high alumina castable with a 66% alumina content and excellent working properties. It has good volume stability, very good modulus of rupture strengths and excellent cold crushing strengths, thermal shock resistance, and refractoriness. For optimum installed physical properties, cast-vibrating is recommended with a high frequency internal vibrator. PUROCRETE is particularly recommended for its good resistance to iron and slag.
PURO-TAB®	is a high purity, low iron, 94% alumina castable designed specifically for use at temperatures up to 3400°F. It is highly resistant to reducing atmospheres as well as high sulfur fuels and charge stocks. Due to its low silica content, it withstands hydrogen atmospheres where silica reduction often occurs. PURO-TAB has good volume stability with very good resistance to thermal shock.
PURO-TAB® COARSE	is a specially developed, high alumina (97%), low iron castable. It has superior resistance to carbon monoxide attack due to its extremely low iron content. With its high purity and chemical inertness, oxides and alkalis have little adverse effect. In both ferrous and non-ferrous applications, it resists molten metals and slags. The coarse aggregate improves resistance to thermal shock.
RESCOCAST® 15	is a 2550°F service limit castable recommended for application in areas where moderate erosion resistance and medium insulating values are required. This mix can be easily installed by troweling, casting or gunning.
RESCOCAST® 15GM	is a 2600°F service limit castable used in applications where high strength, moderate abrasion resistance, and medium insulating values are required. RESCOCAST 15GM is an excellent gunite material that can also be cast or troweled.
RESCOCAST® 15HT	a 2700°F, 49% alumina castable contains a high-purity cement binder which results in improved physical properties and increased resistance to chemical attack, particularly in reducing atmospheres. RESCOCAST 15HT can be applied by troweling, casting or gunning.
RESCOCAST® 17	is a 3000°F service limit castable with high strength and erosion resistance properties throughout a wide application temperature range. Specify ProGun 17G for gunite applications.
SAKONITE®	is a very economical refractory concrete. Although its maximum service temperature is 2200°F, it is designed primarily for service between 70°F and 1000°F. It is widely used for cast floors exposed to molten metals or hot ingots. It can be cast or pumped and finished like ordinary concrete. It may also be rammed or cast-vibrated for increased density and strength with minimum shrinkage. SAKONITE is also available as GC SAKONITE gun mix.



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EZ CAST
RESCOCAST
PYROCAST
EZ³
FURN-A-RAM
FURNAS CRETE
HI-STRENGTH
HI-STRENGTH COARSE
LADLELINE
PUROCAST N
PUROCRETE
PUROTAB
FURNA³
FURNAS CRETE COARSE
PUROTAB COARSE
PROGUN 17G

CONVENTIONAL CASTABLES

General Purpose products for multiple applications and installation methods



English Units



Typical Physical Data (English Units): Conventional Castables

Cast Data	Service Temp. °F	Al ₂ O ₃ %	Bulk Density (pcf)	REHEAT PROPERTIES						THERMAL CONDUCTIVITY OR "K" FACTOR (BTU/(ft ² ,hr,°F,in))			
				Cold Crushing Strength (psi)		Modulus of Rupture (psi)		Permanent Linear Change (%)		500°F	1000°F	1500°F	2000°F
				1500°F	2500°F	1500°F	2500°F	1500°F	2500°F				
SAKONITE	2200	33.7	121-127	1000-2000	---	200-600	---	-0.1 to 0.7	---	---	7.00*	6.00*	6.10*
HI-STRENGTH COARSE 23	2350	41.4	136-141	5600-6400	---	500-900	---	-0.1 to -0.3	---	---	7.00*	7.30*	7.70*
EZ CAST 40-AL	2500	41.7	140-144	8000-12000	8000-12000	1500-1900	1500-1900	-0.5 to -0.1	-0.1 to +0.3	---	---	11.80*	12.20*
FURNA ³ 40	2500	41.8	140-144	8000-12000	8000-12000	1500-1900	1500-1900	-0.5 to -0.1	-0.1 to +0.3	---	---	11.80*	12.20*
HI-STRENGTH 25	2500	43.5	124-130	1600-2200	---	300-700	---	-0.2 to +0.2	---	---	6.50*	7.10*	8.00*
HI-STRENGTH COARSE 25-LI	2550	43.4	122-127	2500-7000	3300-7800	550-1150	700-1700	-0.5 to +0.1	2.0 to 2.6	---	7.90*	8.30*	8.50*
Rescocast 15	2550	46.0	123	2500-5000	3500-5000	400-600	500-700	-0.1 to -0.3	0.0 to -1.4	---	4.00	4.60	5.30
FURNAS CRETE	2600	40.3	108-114	600-800	2500-5500	200-300	800-2100	-0.2 to -0.5	-1.2 to +0.3	---	---	6.20*	6.70*
FURN-A-RAM	2600	40.3	121-124	2300-3100	---	500-700	---	-0.3 to -0.6	---	---	7.20*	7.40*	---
FURNAS CRETE COARSE	2600	40.4	112-120	1100-1600	4500-5000	200-400	900-1600	-0.1 to -0.6	-0.7 to +1.5	---	---	6.60*	6.90*
EZ ³ LO-ERODE	2600	44.1	137-141	9000-13000	---	1200-2000	---	0.0 to -0.3	---	10.60*	---	10.90*	11.60*
HI-STRENGTH 26-LI	2600	46.2	122-130	1800-4000	3000-5500	400-600	1500-2000	-0.2 to +0.2	0.3 to 1.2	---	---	7.30*	8.00*
Rescocast 15GM	2600	46.4	124	5000-8000	6000-9000	500-800	1000-1500	0.0 to -0.2	+0.6 to +1.3	---	4.00	4.50	5.00
EZ CAST 2700	2700	42.2	140-144	8000-12000	8000-12000	1500-1900	1500-1900	-0.5 to -0.1	-0.1 to +0.3	11.80*	---	12.20*	11.70*
EZ ³ 2700	2700	42.2	140-144	8000-12000	8000-12000	1500-1900	1500-1900	-0.5 to -0.1	-0.2 to +0.3	---	---	11.80*	12.20*
Rescocast 15HT Coarse	2700	48.4	127	4500-7000	5000-8000	700-1100	800-1200	0.0 to -0.3	0.0 to -1.0	---	4.50	4.80	5.20
Rescocast 15HT	2700	49.3	124	2000-4500	3000-5000	500-800	800-1200	0.0 to -0.3	0.0 to -1.0	---	4.50	4.80	5.20
HI-STRENGTH COARSE 27	2700	53.9	136-141	1400-1700	1400-2300	300-500	500-900	0.0 to -0.3	-0.6 to +1.5	---	---	8.80*	9.30*
EZ ³ 2800	2800	44.8	135-140	9000-15000	5000-11000	1300-1900	1000-1600	-0.3 to +0.2	-1.0 to -0.5	10.30*	---	10.60*	11.30*
EZ CAST 2800	2800	44.8	139-145	7000-13000	4000-10000	1200-1600	1200-1600	0.0 to -0.2	-0.6 to 0.0	10.70*	---	11.50*	11.50*
HI-STRENGTH 28-LI	2800	45.6	125-134	2000-4000	3000-6000	400-700	1300-2600	-0.2 to +0.2	0.0 to +1.0	---	---	8.10*	8.90*
Rescocast 17	3000	53.2	133	6500-8500	7000-10000	1200-1500	1500-1800	0.0 to -0.3	-0.5 to -1.0	---	6.50	6.95	7.35
LADLELINE	3000	56.2	135-143	1200-3200	---	300-700	---	-0.4 to 0.0	---	---	---	9.70*	10.20*
PUROCAST N	3000	62.3	137-140	800-1800	---	200-300	---	-0.1 to -0.7	---	---	---	8.90*	---
PUROCRETE	3200	66.3	140-145	2300-2800	3500-4500	400-600	1100-1600	-0.2 to -0.5	1.0 to 1.4	---	---	10.90*	11.70*
PUROTAB	3400	94.0	161-174	7300-9900	6100-11000	1500-2100	1300-2600	-0.1 to -0.5	-0.4 to -1.3	---	---	16.90*	17.10*
PUROTAB COARSE	3400	97.0	180-185	3400-9400	5800-11800	800-1800	1700-2700	-0.3 to -0.6	-0.2 to -0.8	48.10*	20.50*	19.60*	19.20*

Gun

Rescocast 15	2550	46.0	115-125	2500-5000	3000-5000	600-900	800-1200	0.0 to -0.3	-0.3 to -1.5	---	---	---	---
Rescocast 15GM	2600	46.4	124	5000-8000	5000-8000	700-1100	1200-1600	-0.1 to -0.3	+0.5 to +1.4	---	---	---	---
Rescocast 15HT	2700	49.3	120-130	2000-3000	2000-3000	500-800	700-1000	0.0 to -0.3	-0.3 to -1.4	---	---	---	---
ProGun 17G (formerly Rescocast 17G)	3000	53.2	135-145	6000-10000	6000-10000	800-1200	800-1200	0.0 to -0.3	-0.1 to -0.3	---	7.80	8.10	8.20
Pyrocast FPM-G	---	1.3	125-130	---	---	---	---	---	---	---	---	---	---

Self Level/Pump Cast

EZ CAST 40-AL	2500	41.7	135-139	3000-7000	4000-8000	600-1000	1400-1800	0.0 to -0.3	-0.1 to +0.3	---	---	10.50*	10.80*
FURNA ³ 40	2500	41.8	135-139	3000-7000	4000-8000	600-1000	1400-1800	0.0 to -0.3	-0.1 to +0.3	---	---	10.50*	10.80*
Rescocast 15GM	2600	46.4	121	4000-6500	5000-8000	350-600	800-1200	0.0 to -0.3	+0.6 to +1.3	2.35	2.50	2.90	3.35
EZ ³ LO-ERODE	2600	44.1	135-139	8000-12000	---	1200-2000	---	0.0 to -0.3	---	9.40*	---	10.00*	10.60*
EZ CAST 2700	2700	42.2	135-139	3000-7000	4000-8000	600-1000	1400-1800	0.0 to -0.3	-0.1 to +0.3	---	---	10.50*	10.80*
EZ ³ 2700	2700	42.2	132-136	6000-10000	6000-14000	1400-1900	1800-2200	0.0 to -0.2	-1.2 to 0.0	---	---	11.80*	12.20*
EZ ³ 2800	2800	44.8	135-140	5500-9500	5500-9500	1100-1600	1300-1800	-0.1 to 0.1	0.0 to -0.2	---	---	10.20*	11.00*
EZ CAST 2800	2800	44.8	136-140	5000-8000	4000-7000	900-1300	1200-1600	0.0 to -0.2	-0.9 to -0.6	---	---	10.20*	11.00*

Shotcrete

FURNA ³ 40	2500	41.8	128-134	4900-8900	4000-8400	1300-1700	1000-1400	0.0 to -0.3	-0.7 to 0.0	---	---	11.80*	12.20*
EZ ³ LO-ERODE	2600	44.1	134-140	4000-10000	4000-7000	600-1600	1700-2100	-0.6 to 0.0	-0.7 to -1.1	9.50*	---	10.10*	10.40*
EZ ³ 2700	2700	42.2	130-136	3000-9000	4000-9500	700-1700	500--1500	-0.2 to +0.1	-0.8 to -0.2	8.40*	---	9.40*	10.20*
EZ ³ 2800	2800	44.8	131-136	5000-7000	5500-7500	1400-1800	1400-1800	0.0 to -0.2	-0.6 to -0.2	10.20*	---	10.20*	11.00*

* Denotes values obtained via Hotwire Method

Conversion Factors: Multiply psi by 0.0703 to get Kg/cm²; Multiply lbs/ft³ by 16.02 to get Kg/m³; Multiply BTU/(ft²,hr,°F,in) by 0.144 to get W/m²*K

