

- RESCOCAST® 3-20R** is a 2000°F service limit castable that can be cast or gunned. For example, when using **RESCOCAST 3-20R** for tunnel kiln car constructions, lighter-weight designs and energy-saving operations are achieved.
- RESCOCAST® 3-35** is an insulating castable with a maximum operating temperature of 2000°F and good strength-to-density ratio. It has been used as an insulating material in bi-wall linings, and also as a single component lining where erosive conditions are not severe. Unlike loose fill or insulating block, **RESCOCAST 3-35** will not settle or disintegrate under adverse conditions. This product can be cast or gunned into place.
- RESCOCAST® 3-35P** is a 2000°F service limit, 29 lbs/ft³, gunite castable, recommended as a backup insulating material in dual-component linings or for single-component linings where erosion conditions are mild. **RESCOCAST 3-35P** will not settle or disintegrate under adverse conditions. Specify **RESCOCAST 3-35PC** for pump-casting installations.
- RESCOCAST® 3** is a multi-purpose, 2400°F service limit, 60 lbs/ft³, insulating castable with a cost-effective balance between moderate strength and lower "K" Factor. This product has been used with reliability for many years as a single-layer lining in crude heaters, furnaces and other process vessels or as the backup layer in dual-component linings. A special pump-cast version, **Rescocoast 3PC**, is available; it can be cast, pumped, or shotcreted.
- RESCOCAST® 3A** is a 2400°F service limit, 60 lbs/ft³, insulating castable with physical properties similar to **RESCOCAST 3**. Because of the low iron content, **RESCOCAST 3A** is well suited for lining applications where reducing atmospheres are present, including some of the newer gasification vessels.
- RESCOCAST® 3B** is a 50 lbs/ft³ insulating material that is easily placed by troweling, casting, or gunning. This ease of application combined with its good insulating values makes this product an ideal choice for heaters, ducts, and other related components.
- RESCOCAST® 3E** is a special, high-strength, 2200°F service limit, 60 lbs/ft³, insulating castable used for single-component linings in refinery and petrochemical industry process vessels, such as fluid catalytic cracking units. This product can be cast or gunned.
- RESCOCAST® 4LI** is a low-iron, 2600°F service limit, 67 lbs/ft³, insulating castable which was formulated for use in controlled-atmosphere applications, such as methane, hydrogen and carbon monoxide. It has been used successfully in many heater applications including prefabricated panels and pump-cast arch roof installations. This product can be installed by casting or gunning.
- RESCOCAST® 6** is a special, high-strength, 2400°F service limit, 73 lbs/ft³, insulating castable designed primarily for use in refinery and petrochemical vessels, where higher-strength linings are required. The standard mix can be cast or gunned. **Rescocoast 6A** is a special version available for aluminum applications. **Rescocoast 6PC** is available for shotcreting and pumping applications.
- RESCOCAST® 7** is the original one-shot, 2400°F service limit, 75 lbs/ft³, lining material for fluid catalytic cracking unit reactor and regenerator vessels. Good erosion resistance combined with better insulating qualities make this product an outstanding value and an ideal choice for other industrial applications as well. This product can be installed by casting or gunning.
- RESCOCAST® 8** is a 2800°F service limit, 88 lbs/ft³, low-iron, insulating castable suitable for use in many different atmospheric conditions, including carbon monoxide boilers. This product can be installed by casting or gunning.
- RESCOCAST® 9** is a 2600°F service limit, 95 lbs/ft³, semi-insulating product, providing protection against heat loss and good erosion resistance in applications having high unit particle loading factors in combination with moderate velocities. **RESCOCAST 9** combines highly desirable properties of both insulating and general duty castables into one universal mix. It has been used globally for many years for lining reactor and regenerator vessels of FCCU's and in other critical applications. A low iron version, **Rescocoast 9LI**, is available. For pump-casting/shotcreting applications, **Rescocoast 9 LIPC** is recommended.
- KC MIX** is a high performance insulating castable for a variety of kiln car applications. Its density is approximately 60 lbs/ft³ and offers superior strength characteristics, as well as a high strength-to-insulation ratio. Use of this material at the base of kiln cars assures that under car temperatures remain well within required limits.
- LHV-124** is an L:H:V-containing mix using carefully controlled raw materials. Uniform installed properties exceed customer specifications. "Field" mix variations are eliminated. This product can be installed by casting or gunning.
- IRC® 22** is a 2250 °F insulating castable, has a density of 48 to 54 lbs/ft³, and can be cast or gunned.
- IRC® 29-LI** is a 2900 °F, low iron insulating castable with a density of 70 to 77 lbs/ft³.
- PUROLITE 30** is a unique 3000 °F castable that can be cast or gunned. Its density is 84 to 91 lbs/ft³.
- RESCOCAST® RS-3005 NS** is an 80 lbs/ft³ high purity alumina castable recommended for cast vibrating, and it features low thermal conductivity with a 3400 °F temperature limit. It is ideal for use in carbon monoxide and hydrogen atmospheres. This product is virtually silica free.



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IRC
 RESCOCAST
 RESCOCAST PC
 KC MIX
 LHV-124
 PUROLITE 30
 IRC
 RESCOCAST
 RESCOCAST PC
 KC MIX
 LHV-124
 PUROLITE 30
 IRC
 RESCOCAST
 RESCOCAST PC
 KC MIX
 LHV-124

INSULATING CASTABLES

Light Weight and Medium Weight products for multiple applications and installation methods



English Units



Typical Physical Data (English Units): Insulating Castables

Cast Data Product	Service Temp. °F	Bulk Density (pcf)	REHEAT PROPERTIES						Porosity (%)	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	2000°F	1500°F	2000°F	1500°F	2000°F					
Rescicast 3-20R	2000	23	50-100	50-100	---	---	-0.8 to -1.5	-1.0 to -2.0	80	0.90	0.90	1.10	---
Rescicast 3-35	2000	37	75-125	75-200	---	---	-0.7 to -1.2	-1.0 to -2.0	60	1.05	1.15	1.25	---
Rescicast 3B	2000	50	175-275	175-275	100-150	100-150	-0.4 to -0.8	-0.9 to -1.5	55	1.10	1.25	1.55	---
Rescicast 3-35P	2000	25-29	60-100	60-150	---	---	-0.5 to -1.0	-0.8 to -1.5	---	0.95	1.05	1.15	---
LHV-124	2000	50-60	150-200	200-800	100-130	95-120	-0.1 to -0.4	-0.2 to -0.8	---	1.70	1.65	1.80	---
Rescicast 3E	2200	61	600-1000	500-700	100-200	150-200	-0.1 to -0.3	-0.3 to -0.8	50	1.40	1.60	1.70	---
I-R-C 22	2250	48-54	300-500	200-350	90-120	90-120	-0.3 to -0.9	-0.3 to -1.1	---	2.60*	2.30*	2.40*	2.90*
KC Mix	2400	60	400-700	600-900	150-300	150-250	0.0 to -0.6	-0.4 to -0.8	---	1.70	1.65	1.80	---
Rescicast 3	2400	60	400-700	600-900	100-200	150-250	-0.2 to -0.6	-0.4 to -0.8	---	1.70	1.65	1.80	---
Rescicast 6	2400	73	1500-1800	1200-1600	200-500	200-500	-0.1 to -0.3	-0.8 to -1.2	43	2.70	2.85	3.00	3.20
Rescicast 6A	2400	73	1500-1800	1200-1600	200-500	200-500	-0.1 to -0.3	-0.8 to -1.2	43	2.70	2.85	3.00	3.20
Rescicast 7	2400	75	1300-1800	1400-1800	200-300	150-250	0.0 to -0.3	-0.4 to -0.8	41	2.10	2.35	2.56	---
Rescicast 3A	2500	62	300-450	300-450	100-200	100-200	-0.1 to -0.5	-0.4 to -0.9	50	1.40	1.60	1.70	1.85
Rescicast 4LI	2600	67	500-800	400-700	150-300	150-300	-0.1 to -0.4	-0.1 to -0.4	50	1.95	2.20	2.45	2.95
Rescicast 9	2600	90	600-1000	800-1000	150-300	200-300	-0.2 to +0.2	-0.2 to +0.2	43	2.35	2.50	2.90	3.35
Rescicast 9LI	2600	90	600-1000	800-1000	150-300	200-300	-0.2 to +0.2	-0.1 to +0.2	43	2.35	2.50	2.90	3.35
Rescicast 8	2800	88	600-1000	800-1000	150-300	200-300	-0.1 to +0.2	-0.1 to +0.2	40	2.50	2.70	2.85	3.05
I-R-C 29-LI	2900	70-77	400-700	400-600	100-300	200-300	-0.5 to -0.8	-0.8 to -1.0	---	---	3.10*	3.40*	4.20*
PUROLITE 30	3000	84-91	400-600	400-600	200-250	250-350	-0.4 to -0.7	-0.4 to -0.8	---	---	4.10*	4.20*	4.80*
Rescicast RS-3005 NS	3400	78	870	---	250	---	-0.1	---	---	---	2.70	---	---

Pump Cast Data

Rescicast 3-35PC	2000	33	75-200	75-200	---	---	-0.8 to -1.5	-1.0 to -2.0	---	1.05	1.00	1.10	---
Rescicast 3PC	2400	56	350-650	500-800	50-150	100-200	-0.1 to -0.6	-0.4 to -0.8	---	1.70	1.65	1.80	---
Rescicast 6PC	2400	80-86	2000-3000	---	450-750	---	-0.1 to -0.4	---	---	1.90	2.10	2.40	---
Rescicast 9LIPC	2600	88	500-900	600-900	100-250	100-250	0.0 to -0.3	---	43	2.35	2.50	2.90	3.35

Gunited Data

Rescicast 3-35P	2000	30-35	100-200	100-200	---	---	-0.8 to -1.5	---	---	1.05	1.15	1.25	---
Rescicast 3-20R	2000	30-40	100-200	100-200	---	---	-0.5 to -1.5	-1.0 to -2.0	---	1.05	1.15	1.25	---
Rescicast 3-35	2000	40-45	100-300	100-200	---	---	-0.5 to -1.2	-1.0 to -2.0	58	1.10	1.25	1.45	---
Rescicast 3B	2000	55-65	200-400	100-300	100-150	100-150	-0.5 to -1.0	-0.8 to -1.8	53	1.20	1.30	1.60	---
LHV-124	2000	65-75	400-800	---	---	---	-0.3 to -0.7	---	---	1.85	1.90	2.35	---
Rescicast 3E	2200	65-75	500-900	500-900	300-600	300-600	-0.2 to -0.4	-0.5 to -1.0	45	1.55	1.75	2.00	---
KC Mix	2400	70-80	500-900	250-450	300-500	250-450	-0.3 to -0.7	-0.5 to -1.1	---	1.85	1.90	2.35	---
Rescicast 3	2400	70-80	500-900	600-900	300-500	250-450	-0.3 to -0.7	-0.5 to -1.1	---	1.85	1.90	2.35	---
Rescicast 6	2400	75-85	1500-1800	1200-1600	200-500	200-500	-0.1 to -0.3	-0.8 to -1.2	40	2.80	2.95	3.10	---
Rescicast 6A	2400	75-85	1500-1800	1200-1600	200-500	200-500	-0.1 to -0.3	-0.8 to -1.2	40	2.80	2.95	3.10	---
Rescicast 7	2400	80-90	2000-3000	1500-2000	400-800	300-700	0.0 to -0.3	-0.4 to -0.6	36	2.50	2.80	3.20	---
Rescicast 3A	2500	65-75	350-500	350-500	150-250	150-250	-0.1 to -0.3	-0.3 to -0.6	45	1.85	2.35	2.50	---
Rescicast 4LI	2600	80-90	600-1000	600-1000	200-400	200-400	0.0 to -0.3	-0.1 to -0.4	45	2.10	2.40	2.60	---
Rescicast 9	2600	90-100	800-1200	800-1200	300-500	250-350	-0.2 to +0.2	-0.2 to +0.2	40	2.60	2.80	3.00	---
Rescicast 9LI	2600	90-100	800-1200	800-1200	300-500	250-350	-0.2 to +0.2	-0.2 to +0.2	40	2.60	2.80	3.00	---
Rescicast 8	2800	95-105	900-1300	900-1400	300-500	200-500	-0.1 to +0.2	-0.1 to +0.2	40	2.75	3.05	3.25	---
PUROLITE 30	3000	84-91	400-600	400-600	200-250	250-350	-0.4 to -0.7	-0.4 to -0.8	---	---	3.60*	3.80*	4.50*



* 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

