



General Duty Castables

Cast Data

RESCOCAST 15GM

RESCOCAST 15GM is a 2600°F general duty castable designed for refractory use in powerplant ash-hopper applications as well as other applications where high strength, moderate abrasion resistance, and medium insulating values are required. **RESCOCAST 15GM** is an excellent gunning product that can also be trowelled.

Maximum Service Temperature: 2600°F (1427°C)

Bulk Density:
After 1500°F (815°C): 124 lbs/ft³ (1984 kg/m³)

Cold Crushing Strength:
After 220°F (105°C) 8000-11000 psi (560-770 kg/cm²)
After 1000°F (540°C) 6000- 9000 psi (420-630 kg/cm²)
After 1500°F (815°C) 5000- 8000 psi (350-560 kg/cm²)
After 2500°F (1370°C) 6000- 9000 psi (420-630 kg/cm²)

Modulus of Rupture:
After 220°F (105°C) 1000-1500 psi (70-105 kg/cm²)
After 1000°F (540°C) 600- 900 psi (42- 63 kg/cm²)
After 1500°F (815°C) 500- 800 psi (35- 56 kg/cm²)
After 2500°F (1370°C) 1000-1500 psi (70-105 kg/cm²)

Erosion Loss using ASTM C-704 Method:
After 1500°F (815°C) 18 cc (typical)

Conductivity or "K" Factor:

| Mean Temp. | BTU/ft ² /Hr/°F/in | W/mK |
|-----------------|-------------------------------|------|
| 1000°F (540°C) | 4.00 | 0.58 |
| 1500°F (815°C) | 4.50 | 0.65 |
| 2000°F (1095°C) | 5.00 | 0.72 |

Permanent Linear Change(%):
After 1500°F (815°C) 0.0 to -0.2
After 2500°F (1370°C) +0.6 to +1.3

Typical Chemical Analysis(%):

| Al ₂ O ₃ | SiO ₂ | Fe ₂ O ₃ | CaO | MgO | TiO ₂ | Alkalies |
|--------------------------------|------------------|--------------------------------|------|-----|------------------|----------|
| 46.4 | 39.9 | 1.1 | 11.1 | Tr | 1.3 | 0.2 |

Standard Packaging: 72-55 lb. bags per pallet. Bulk packaging available.

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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General Duty Castables – page 2

Gunned Data

RESCOCAST 15GM **GUNNED DATA**

RESCOCAST 15GM is an excellent gunning product with very low rebound losses. Data shown are average results of testing following the guidelines as set forth in ASTM C903-70, "Preparing Refractory Concrete Specimens by Cold Gunning".

| | |
|---|--|
| <u>Maximum Service Temperature:</u> | 2600°F (1427°C) |
| <u>Bulk Density:</u> After 1500°F (815°C): | 124 lbs/ft ³ (1984 kg/m ³) |
| <u>Cold Crushing Strength:</u> After 220°F (105°C); After 1000°F (540°C); After 1500°F (815°C); After 2500°F (1370°C): | 7000-10000 psi (490-700 kg/cm ²) 5000- 7000 psi (350-490 kg/cm ²) 5000- 8000 psi (350-560 kg/cm ²) 5000- 8000 psi (350-560 kg/cm ²) |
| <u>Modulus of Rupture:</u> After 220°F (105°C); After 1000°F (540°C); After 1500°F (815°C); After 2500°F (1370°C): | 1200-1600 psi (84-112 kg/cm ²) 600- 900 psi (42- 63 kg/cm ²) 700-1100 psi (49- 77 kg/cm ²) 1200-1600 psi (84-112 kg/cm ²) |
| <u>Erosion Loss using ASTM C-704 Method:</u> After 1500°F (815°C): | 18 cc (typical) |
| <u>Permanent Linear Change (%):</u> After 1000°F (540°C); After 1500°F (815°C); After 2500°F (1370°C): | -0.1 to -0.3 -0.1 to -0.3 +0.5 to +1.4 |