

GENERAL DUTY CASTABLES

PRODUCT DATA

RESCOCAST 1850G

RESCOCAST 1850G IS A HIGH TEMPERATURE, HIGH PURITY CASTABLE WITH LOW IRON AND LOW SILICA CONTENTS.. ALUMINA CONTENT OF 93 PERCENT GIVES THE PRODUCT A MAXIMUM SERVICE TEMPERATURE OF 1850°C. DATA SHOWN ARE AVERAGE RESULTS OF TESTS FOLLOWING THE GUIDELINES SET FORTH IN ASTM C-903-70 "PREPARING REFRACTORY CONCRETE SPECIMENS BY COLD GUNNING".

MAXIMUM SERVICE TEMPERATURE (M.S.T.) (1850°C)

BULK DENSITY

| @ 815°C | 165 - 175 | LBS/FT ³ | 2643 - 2803 | KG/M ³ | | | | |
|----------------------------|-------------|---------------------|---------------|--------------------|--|--|--|--|
| COLD CRUSHING STRENGTH | | | | | | | | |
| 2 | | | | | | | | |
| | 5000 - 8000 | P.S.I. | 560 - 560 | KG/CM ² | | | | |
| COLD MODULUS OF RUPTURE | | | | | | | | |
| @ 815°C | 1000 - 1400 | P.S.I. | 70 - 105 | KG/CM ² | | | | |
| | | | | | | | | |
| PERMANENT LINEAR CHANGE | | | | | | | | |
| @ 815°C | | - 0.0 | TO - 0.3 % | | | | | |
| @ 1095°C | | - 0.5 TO - 0.7 % | | | | | | |
| @ 1510°C | | - 0.9 TO - 1.5 % | | | | | | |
| CONDUCTIVITY OR "K" FACTOR | | | | | | | | |
| MEAN TEMP | | BTU/FT²/Hr/°F/ | <u>/in W/</u> | <u>W/mK</u> | | | | |
| @ 540°C | | 16.8 | | .44 | | | | |
| @ 815°C | | 16.5 | | .39 | | | | |
| @ 1095°C | | 16.7 | 2. | .42 | | | | |

TYPICAL CHEMICAL ANALYSIS (%)

| AL ₂ O ₃ | SiO ₂ | Fe ₂ O ₃ | CaO | MgO | TiO2 |
|--------------------------------|------------------|--------------------------------|-----|------|------|
| 93.0 | 0.3 | 0.08 | 5.7 | 0.14 | 0.3 |

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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RESCOCAST 1850G GUNNING GRADE MATERIAL HAS BEEN CAST IN THE LABORATORY AS A MEANS OF TESTING AND CONTROLLING THE QUALITY OF THE PRODUCT. IT IS NOT RECOMMENDED THAT THE MATERIAL BE APPLIED IN THE FIELD BY CASTING APPLICATION METHODS. THE RESULTS SHOWN BELOW ARE TYPICAL OF <u>LABORATORY CAST SPECIMENS ONLY</u>.

BULK DENSITY

@ 815°C 175 LBS/FT³ 2800 KG/M³ (max)

COLD CRUSHING STRENGTH

@ 815°C 7000 P.S.I. 490 KG/CM² (mim)

PERMANENT LINEAR CHANGE

| Green to 110°C | -0.0 | to - 0.1% |
|----------------|------|-----------|
| 110°C to 815°C | -0.0 | to - 0.3% |