



**RAND YORK**  
MINERALS

Official Certificate of Analysis

Reg No. 1985/004951/07

Vat No. 4400137867

Tel: +27 (11) 463 9000

Fax +27 (11) 463 7002

Email: randyork@mweb.co.za

Benmore 2010 South  
Africa

PO Box 650755

BATCH SPECIFICATION SHEET -  
321

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## FOUNDRIY CHROMITE SAND AFS 45-50 – 21T45

Foundry grade chromite sand is used for its unique properties, high thermal conductivity, heat resistant, low heat dilating and a cost-effective way to produce and use in some of the below applications:

- Specially treated molds
- Quality castings
- Metal casting
- Automotive castings
- Alloys such as stainless steel
- Chrome plating
- Metal ceramics

### ANALYSIS ON DRY BASIS

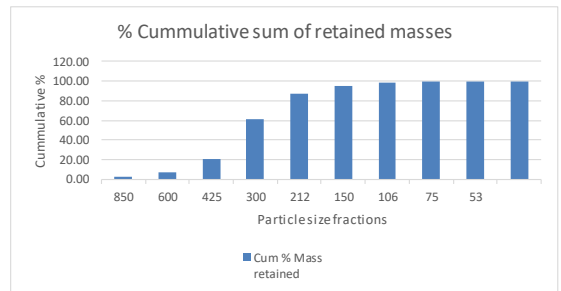
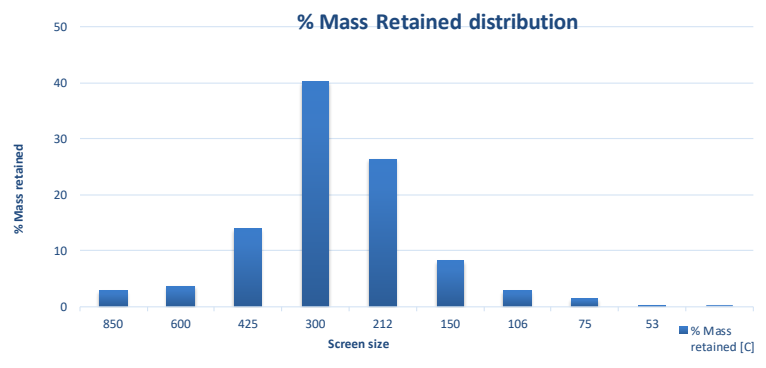
| ANALYSIS/DETERMINATION | Typical VALUE |
|------------------------|---------------|
| CR2O3 (%)              | 45.00         |
| SiO2 (%)               | 0.47          |
| FeO (%)                | 28.9          |
| Cr :Fe Ratio           | 1.37          |
| CaO (%)                | 0.2           |
| Al2O3 (%)              | 14.9          |
| MgO                    | 8.9           |
| AFS                    | 45.73         |
| Moisture               | 0.0005        |
| Turbidity              | 186.00 NTU    |
| Turbidity              | 62.00 PPM     |
| pH                     | 7.13          |
| pH 3                   | 3.5           |
| pH 4                   | 2.7           |
| pH 5                   | 2.2           |
| LOI                    | 1.1           |

\*All bagged cargo is guaranteed at 0.05% moisture

| Sieve size (μm) | Mass (g) retained [A] | Factor [B] | Product [AxB] | % Mass retained [C] | Cum % Mass retained | Cum % Mass passing | Factor [D] | Product[CxD] |
|-----------------|-----------------------|------------|---------------|---------------------|---------------------|--------------------|------------|--------------|
| 850             | 4.4                   | 10         | 44            | 2.92                | 2.92                | 97.08              |            |              |
| 600             | 5.5                   | 20         | 110           | 3.65                | 6.57                | 93.43              | 1000.00    | 3650         |
| 425             | 21                    | 30         | 630           | 13.93               | 20.50               | 79.50              | 500.00     | 6967         |
| 300             | 60.7                  | 40         | 2428          | 40.28               | 60.78               | 39.22              | 355.00     | 14299        |
| 212             | 39.9                  | 50         | 1995          | 26.48               | 87.26               | 12.74              | 250.00     | 6619         |
| 150             | 12.3                  | 70         | 861           | 8.16                | 95.42               | 4.58               | 180.00     | 1469         |
| 106             | 4.4                   | 100        | 440           | 2.92                | 98.34               | 1.66               | 125.00     | 365          |
| 75              | 2.1                   | 140        | 294           | 1.39                | 99.73               | 0.27               | 90.00      | 125          |
| 53              | 0.3                   | 200        | 60            | 0.20                | 99.93               | 0.07               | 63.00      | 13           |
| PAN             | 0.1                   | 300        | 30            | 0.07                | 100.00              | 0.00               | 45.00      | 3            |
|                 | 150.70                |            | 6892          | 7176.19             |                     |                    |            | 33510        |

\* AFS **45.73**  
 AFS Required  
 \* Fines < 106μm **1.66 %**  
 \* Avg grain size **335 μm**

Analytical Method used



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
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