## PRODUCT DATA SHEET



# **CONCRETE AGGREGATE 10mm Product Code: ABF210**

#### PRODUCT DESCRIPTION

ASMS ABF210 is a single sized 10 mm concrete aggregate conforming to AS2758.1.

#### **APPLICATIONS**

ASMS ABF210 is manufactured as an aggregate for use in concrete.

#### **COMPOSITION AND MATERIALS**

ABF210 is produced by crushing and screening blast furnace slag to a single size 10 mm aggregate consisting of angular to roughly cubical shaped particles with a characteristically vesicular structure and rough surface texture. Aggregates are aged and watered to achieve the target SSD.

Blast furnace slag is the non-metallic product, consisting essentially of silicates and aluminosilicates of calcium and other bases developed in a molten condition simultaneously with iron in a blast furnace.

Air-cooled blast furnace slag is a predominantly crystalline, solid rock-like material.

#### **ADVANTAGES**

- Consistent chemistry.
- Excellent load bearing capacity.
- Non-plastic.
- · Resistant to heat and fire.
- Vesicular surface improves mechanical interlock.
- Economic alternative to natural aggregates.
- Effective utilisation of an industrial by-product conserving natural resources.

#### TYPICAL GRADING

| SIEVE   | % PASSING |  |
|---------|-----------|--|
| 13.2 mm | 100       |  |
| 9.5 mm  | 92        |  |
| 6.7 mm  | 47        |  |
| 4.75 mm | 18        |  |
| 2.36 mm | 10        |  |
| 1.18 mm | 9         |  |

### TYPICAL PHYSICAL PROPERTIES

| PROPERTY               | UNIT | TYPICAL   |
|------------------------|------|-----------|
| Bulk Density (Loose)   | t/m3 | 1.2-1.4   |
| Bulk Density           | t/m3 | 1.3-1.5   |
| (Compacted)            |      |           |
| Particle Density       | t/m3 | 2.75-2.95 |
| (Apparent)             |      |           |
| Particle Density (Dry) |      | t/m3      |
| Particle Density (SSD) | t/m3 | 2.60-2.80 |
| Wet Strength           | kN   | 70-90     |
| Dry Strength           | kN   | 80-100    |
| Water Absorption       | %    | 2.5-6.0   |
| Chlorides              | %    | <0.05     |
| Sulphates as SO3       | %    | <0.2      |
| Alkali Reactivity      | -    | Innocuous |
| Sugar                  | -    | Free      |
| Iron Unsoundness       | -    | Free      |

#### **OXIDE ANALYSIS**

| CONSTITUENT     | SYMBOL | %   |
|-----------------|--------|-----|
| Iron Oxide      | FeO    | 0.5 |
| Calcium Oxide   | CaO    | 42  |
| Silicon Dioxide | SiO2   | 35  |
| Aluminium Oxide | Al2O3  | 14  |
| Magnesium Oxide | MgO    | 6   |
| Sulphur         | S      | 0.5 |
| Sodium Oxide    | Na2O   | 0.3 |

#### **TECHNICAL AND CUSTOMER ENQUIRIES**

Telephone: (02) 4255 1100

Email: enquiries@asms.com.au

#### ASMS DISCLAIMER

The information contained in this Product Data Sheet is accurate for general consideration, however, no warranty is expressed or implied regarding the accuracy of this data on specific applications. Information is furnished upon the condition that the user shall obtain specific advice and/or carry out tests to determine suitability for a particular purpose and for specific site and application conditions. Sales specifications, although current at the time of publication, are subject to change due to process improvements. For the latest product specifications or usage updates contact ASMS. PDS-GBF006: Rev. 5: 05.03.24 1/1