



TECHNICAL DATA SHEET

ASAP CAST 70 LC is a high alumina, mullite based, ultra low cement castable that can be dried out quickly. It demonstrates high hot strengths and density to resist abrasion, chemical attack and erosion at elevated temperatures. Low porosity reduces penetration and reaction by alkali, molten metal and slags.

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|--|--------------------|
| SERVICE TEMPERATURE: | 3100°F |
| MATERIAL REQUIRED FOR ESTIMATING: | 160 lbs./cu. ft. |
| CASTING WATER: | 4.5-5.5% by weight |
| PUMPING WATER: | 5.0-6% by weight |

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

| | | | | | |
|--------------------------------|------------------|--------------------------------|------------------|------|----------|
| Al ₂ O ₃ | SiO ₂ | Fe ₂ O ₃ | TiO ₂ | CaO | Alkalies |
| 69 -72 | 23 – 25 | <1.0 | <2.2 | <1.0 | <0.2 |

TYPICAL PHYSICAL PROPERTIES

| Prefired to °F | Modulus of Rupture, psi | Cold Crushing Strength, psi | Linear Change % | Hot MOR Psi | Porosity % |
|----------------|-------------------------|-----------------------------|-----------------|-------------|------------|
| 250 | 1,000 – 2,000 | 5,750 – 7,250 | Nil | --- | --- |
| 1500 | 1,800 – 2,280 | 6,700 – 9,400 | -0.2 | 3,850 | 16.4 |
| 2000 | 3,500 – 4,000 | 10,000-12,500 | -0.3 | --- | --- |
| 2500 | 3,700 – 4,200 | >14,000 | -0.1 | --- | 16.5 |
| 2750 | 3,536 – 3,802 | 15,075-15382 | +0.4 | 1,126 | --- |

COEFFICIENT of THERMAL EXPANSION: 2.25 E⁻⁶ in/in/°F

ABRASION LOSS AFTER 1500°F: 3-4 cc

ABRASION LOSS AFTER 2500°F: 2-3 cc

THERMAL CYCLE LOSS, C-1171: -25%

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.)
1500 lb. Bags, 2 per Pallet (3000 lbs.)
2000 lb. Bags, 2 per Pallet (4000 lbs.)

154500 – 5/19/13

The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.