# Spinel Alumina Castable 90% Al2O3 P-CAST-A90S

Castables & Ramming Mixes

Material type: Dense refractory concrete (Low Cement Castable)
Raw material basis: Tabular alumina, alumina spinel and special additives

| Al2O3 | Bulk density | Grain size | Cold crushing strength (1… |
|---|---|---|---|
| **89 – 90 %** | **2.75 – 2.95 g/cm³** | **0 – 8 mm** | **400 – 600 kg/cm²** |

## Applications

- Working linings of steel ladles and steelmaking equipment
- Areas in contact with slag at high temperatures

## Chemical analysis

| Component | Value | Unit |
|---|---|---|
| **$Al_2O_3$** | 89 – 90 | % |
| **MgO** | Approx. 2 | % |
| **CaO** | 1 – 2.5 | % |
| **$Fe_2O_3$** | 1 – 2 | % |
| **$TiO_2$** | 1 – 2 | % |
| **$SiO_2$** | 2 – 6 | % |

## Physical properties

| Property | Value | Unit |
|---|---|---|
| **Bonding system** | Hydraulic | |
| **Grain size** | 0 – 8 | mm |
| **Maximum service temperature** | 1750 | °C |
| **Bulk density** | 2.75 – 2.95 | g/cm³ |
| **Cold crushing strength (110 °C)** | 400 – 600 | kg/cm² |
| **Cold crushing strength (800 °C)** | 450 – 500 | kg/cm² |
| **Cold crushing strength (1100 °C)** | 750 – 850 | kg/cm² |

## Packaging & storage

Packaging: 25 kg bags (dry mix, water is added on site)
Shelf life: 6 months (dry, cool, frost-free place)

## Notes

Installation: casting with vibration; water addition and drying according to the manufacturer's instructions.

The values in this datasheet are typical results of laboratory tests on production samples and do not constitute a guaranteed specification. Consult the Pas Espadana technical team for your specific application.

**Pas Espadana Refractory Co. (Private Joint Stock)**
No. 12, 4th West Street, Sejzi Industrial Estate, Isfahan, Iran
Tel: 031-46413164 Email: info@pasnasooz.ir pasnasooz.ir