

IRAN REFRACTORIES COMPANY

TECHNICAL DATA SHEET



IREFMAG 90

| Classification: | Magnesite Brick |
|--------------------------------------|--|
| $m{P.C.E.}$ (Equivalent temperature) | > 37 (1820°C) |
| Main Raw Material Component: | Dead Burned Magnesia |
| Type Of Bond: | Ceramic |
| Main Applications: | Various purposes; Safety layers in steel melting vessels, Lime kilns as well as Chemical & Nonferrous Industries |

| Chemical Composition (Calcined base) | | | | | | |
|--------------------------------------|--------------------|-----------|----------------------------------|--|--|--|
| MgO % | SiO _{2 %} | CaO % | Fe ₂ O _{3 %} | | | |
| 89 – 91 | 4.5 - 5.5 | 2.0 - 3.5 | 0.5-1.5 | | | |

| Physical Properties | | | | | |
|------------------------|--------------------|-----------|--|--|--|
| Bulk density | g/cm ³ | 2.80-2.95 | | | |
| Cold crushing strength | kg/cm ² | 450-600 | | | |
| Apparent porosity | % | < 19 | | | |
| Modulus of rupture | kg/cm ² | 90-150 | | | |

| Thermomechanical Properties | | | | |
|--|----|----------|--|--|
| Refractoriness under Load T05 | °C | Min 1470 | | |
| Reversible Linear thermal expansion (1400°C) | % | ≈ -1.9 | | |

The above data are typical of the properties of commercial Standard brick .

The data are subject to reasonable variation and therefore should not be used for Specification purposes. They may not be regarded as committed specifications and therefore not as guaranteed properties .

ASTM Test Methods, where applicable, used for determination of data.

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