

AR

Brown Fused Aluminum Oxide

AR is a brown fused aluminum oxide obtained from the fusion of high purity bauxites in electric arc furnaces. It presents an excellent cost/benefit ratio, being recommended for refractory applications in which iron content is not an issue. AR splits bigger than 2mm are not recommend for molded refractories used at temperatures higher than 1,300 °C.

General Characteristics

True Specific Gravity	Melting Point	Crystalline Structure	Color
3.94 g/cm ³	2,020 °C	Alpha Alumina	Brown

Chemical Analysis by XRF (%)

Al ₂ O ₃	TiO ₂	SiO ₂	Fe ₂ O ₃	MgO
96.09	1.70	0.90	0.70	0.18

Typical Physical Properties

Apparent Porosity	Apparent Specific Density
3.94%	3.79 g/cm ³

Apparent Porosity and Apparent Specific Density by ASTM Designation C 20-00.

Grit Size

Size (astm)	Size (mm)
3/4" / 5/16"	19.1 - 8.00
5/16" / 4	8.00 - 4.75
4 / 10	4.75 - 2.00
10 / 20	2.00 - 850 µm
10 / 40	2.00 - 425 µm
20 / 40	850 - 425 µm
40 / 200	425 - 75 µm
TPF II	- 212 µm
200 MF	- 75 µm
325 MF	- 45 µm

* Other grit sizes upon request.