

Ebonygrit 20

Technical Data Sheet

Ebonygrit is produced from a by-product of the combustion of copper, which is processed into abrasive products by BEI PECAL. Typically it is composed of ferrosilicate (Fayalite, Fe_2SiO_4) material and metal oxides, formed when the molten slag is quenched in cold water. This cooling process fractures the slag into coarse, angular particles making it an ideal choice in many abrasive applications.

Typical Chemical Analysis (%):

Iron Oxide	Fe_2O_3	~ 57.0
Silicon Dioxide (total)	SiO_2	~ 29.5 *
Aluminum Oxide	Al_2O_3	~ 5.0
Zinc	Zn	~ 3.5
Calcium Oxide	CaO	~ 2.5
Magnesium Oxide	MgO	~ 1.0
Copper	Cu	~ 1.0
Loss on Ignition	LOI	< 0.01

* Respirable Silica-Quartz None
Respirable Silica-Cristobalite None

Typical Physical Properties:

Colour	Lustrous black	Grain Shape	Angular
Bulk Density (loose)	111 lbs./ft. ³	Moh Hardness	7
Bulk Density (compacted)	126 lbs./ft. ³	Knoop 100 Hardness	~500
Specific Gravity	~3.8	Melting Point	na
Moisture	< 0.20%	Solubility	Insoluble

Air Resources Board: CERTIFIED, 2001
California Environmental Protection Agency
(Test Method No. California 371-A)

% Passing #70 Sieve:	0.4	Specification	<1.1
5 Micron % (after blast):	1.2		<1.9

Typical Gradation: Standard

16/50

U.S. Mesh	Microns	Per Cent	
		Retained	Passing
16	1180	0.2	99.8
20	850	8.0	91.8
30	600	39.8	52.0
40	425	31.4	20.5
50	300	13.6	6.9
70	212	5.6	1.3
100	150	1.2	0.1
140	106	0.1	0.0
200	75	0.0	0.0
PAN	0	0.6	0.0
Grain Fineness #:		27.4	
Nominal Size (mm):		0.50	
Effective Size (mm):		0.33	
Uniformity Coefficient:		1.93	

