



# Brick

## Product Data

### NULINE 4-90

Classification: Resin Bonded, Magnesia - Carbon Brick  
 15 % Carbon Class - Part Fused Magnesia  
 Strength and Antioxidant Additions  
 Tar Impregnated

<u>Physical Data: (Typical)</u>	<u>English Units</u>	<u>Standard Deviation</u>	<u>SI Units</u>	<u>Standard Deviation</u>
	(Mean) <u>lb/ft<sup>3</sup></u>	$\sigma$	<u>kg/m<sup>3</sup></u>	$\sigma$
Bulk Density	183	1.1	2,931	17.6
<b>Coked Properties</b>				
Density	179	1.4	2,867	22.4
Porosity, %	9.2	0.54	9.2	0.54
Total Carbon, %	15.3	0.80	15.3	0.80
	<u>lb/in<sup>2</sup></u>	$\sigma$	<u>N/mm<sup>2</sup></u>	$\sigma$
Crushing Strength At 2800°F (1538°C)	4,780	955	33	6.6
Modulus of Rupture At 70°F (21°C)	2,700	178	19	1.2
At 2000°F (1093°C)	3,260	-	22	-

Chemical Analysis: Approximate  
 (Calcined Basis)

Silica	(SiO <sub>2</sub> )	0.3 %
Alumina	(Al <sub>2</sub> O <sub>3</sub> )	3.6
Iron Oxide	(Fe <sub>2</sub> O <sub>3</sub> )	0.3
Lime	(CaO)	1.3
Magnesia	(MgO)	94.5

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled condition (using standard rectangular shapes), and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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