

# **Nebulox**<sup>TM</sup>

## **RANGE OF ULTRALIGHT POROUS REFRACTORIES**

**Nebulox** ultralight porous refractories offers very low thermal conductivity for high temperature applications up to 1700°C. Produced from pure raw materials through a patented technology, **Nebulox** products are free from fibre and hence safe for health and environment. The unique porous structure offers excellent thermal shock resistance over a wide temperature range and can be easily machined to suit the specific applications. The **Nebulox** is available with two chemical compositions, in standard sizes up to size of 450 x 300 x 64mm. Special sizes/chemistry can be offered on request

### **Applications**

- Hot face insulation
- Laboratory and industrial furnaces
- Electrical and gas fired furnaces
- Low Thermal Mass kiln cars
- Kiln furniture
- Microwave/Infrared furnaces

#### **CARBORUNDUM UNIVERSAL LIMITED**

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#### **Corporate Identity Number**

CIN: L29224TN1954PLC000318

# THE *Nebulox*™ EDGE

- High operating temperatures - 1700°C
- Fiber Free - HSE compliance
- Low thermal conductivity - Significant energy savings
- Chemically Stable - Inert in various operating atmospheres
- High purity - Microwave and Infrared heating
- Low thermal mass - Faster Ramp rate
- Easy sliding of fired parts - Prevents sticking and parts deformation
- Gas permeable surface - Easy gas release for substrate application

## TECHNICAL DATA

Parameter	Test Standard	Nebulox AS 75	Nebulox AS 77	Nebulox SS 75	Nebulox SS 77
Classification temperature (°C)	ASTM C210-95	1700			
Bulk density (g/cc)	EN 1094-4	0.50 ± 0.10	0.70 ± 0.10	0.50 ± 0.10	0.70 ± 0.10
CCS - Cold Crushing Strength (MPa)	ASTM C-133-97 & DIN EN 1094-5	2	3.4	1.5	3.3
Thermal conductivity (W/mK) at mean Temperature					
800°C	EN 993-15 (Parallel hot wire method)	0.43	0.54	0.37	0.48
1000°C		0.44	0.56	0.39	0.48
1200°C		0.46	0.58	0.41	0.5
1400°C		0.49	0.59	0.43	0.52
Chemical Analysis					
Al <sub>2</sub> O <sub>3</sub>	DIN 51001	98		90	
SiO <sub>2</sub>		1.9		10	
Fe <sub>2</sub> O <sub>y</sub> , CaO, ZrO <sub>2</sub> , Cr <sub>2</sub> O <sub>y</sub> , MgO		< 0.05		< 0.05	

Note: Wherever thermal shock is predominant, SS grade recommended.



### REGISTERED OFFICE

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