1700C Vacuum Formed High Temperature Insulation Boards

Technical Specification

SL NO.	Description	Required Value
Vacuum Formed High Temperature fiber insulation Board of nominal composition 78 Alumina and 20 silica. The product should exhibit excellent thermal conductivity, good compressive strength exceptional thermal stability, excellent machinability and excellent chemical stability .		
Special Requirement		1. Insulation boards should be **pre fired** at **1000deg C** (min.) 2. Compatible to **microwave radiation** throughout the temperature range(RT-1700 degC) 3. Inert to organic vapors like polyvinyl alcohol and cellulose based binders
Product Application		To be used in hot face applications in a microwave furnace for heat treatment of ceramics at a temperature range of 1600-1650 deg. C.
1.	Continuous service Temperature requirement	1650 deg. C.
2.	Density	≤0.48g/cc
3.	Loss of ignition @1000C (%)	≤1
4.	Shrinkage @1600 for 24 h (%)	≤1@1600
5.	Compressive Strength(MPa)@10%Compression	≥0.35
6.	Thermal conductivity (W/mK)@1400 deg C	≤0.40@1400C
7.	Modulus Of Rupture (MPa)	≥1.0
8.	Alumina(%) Silica (%)	78(min) 20(min)
9.	Size of the board required(mm) (with minor variation)	900 x 600 x25

No. of boards required: 10

For any clarifications, please contact :

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1600 C vacuum Formed High Temperature Insulation board's with a continuous service temperature of 1500C

(Three sizes (a, b, c): as shown in SL No. 9

a) 1000 x 500 x 25 mm
b) 1000 x x500 x 50mm
c) 1000 x 500 x 100mm

Technical Specifications:

SL NO.	Description	Required Value
Vacuum Formed High Temperature fiber insulation Board of nominal composition 65Alumina. The product should exhibit excellent thermal conductivity, good compressive strength exceptional thermal stability, excellent machinability and excellent chemical stability . **The boards are required in three different thickness: 25 , 50 & 100 mm.**		
Special Requirement		1. Insulation boards should be **pre fired** at **1000deg C** (min.) 2. Compatible to **microwave radiation** throughout the temperature range(RT-1650 deg C) 3. Inert to organic vapors like polyvinyl alcohol and cellulose based binders
Product Application		To be used as hot face applications in a microwave furnace for heat treatment of ceramics at a temperature range of 1500 deg. C.
1.	Continuous service Temperature requirement	1500 deg. C.
2.	Density	≤0.48g/cc
3.	Loss of ignition @1600C (%)	≤1
4.	Shrinkage @1600 for 24 h (%)	≤2@1500
5.	Compressive Strength(MPa)@10%Compression	≥0.10
6.	Thermal conductivity (W/mK)@1400 deg C	≥0.23@1400C
7.	Modulus Of Rupture (MPa)	≥0.15
8.	Alumina (%)	65(min)
9.	Size & quantity of the board required(mm) (with minor variations)	**a) 1000 x 500 x25 : 08 No's** **b) 1000 x 500 x 50: 15 No's** **c) 1000 x 500 x 100: 05 No's**

1600 C vacuum Formed High Temperature Insulation Board with a continuous service temperature of 1600C

(900 x600 x25 mm)

Technical Specifications

SL NO.	Description	Required Value
Vacuum Formed High Temperature fiber insulation Board of nominal composition 74Alumina and 25 silica. The product should exhibit excellent thermal conductivity, good compressive strength exceptional thermal stability, excellent machinability and excellent chemical stability .		
Special Requirement		1. Insulation boards should be **pre fired** at **1000deg C** (min.) 2. Compatible to **microwave radiation** throughout the temperature range(RT-1650 deg C) 3. Inert to organic vapors like polyvinyl alcohol and cellulose based binders
Product Application		To be used in hot face applications in a microwave furnace for heat treatment of ceramics at a temperature range of 1600-1650 deg. C.
1.	Continuous service Temperature requirement	1600 deg. C.
2.	Density	≤0.48g/cc
3.	Loss of ignition @1000C (%)	≤1.0
4.	Shrinkage @1600 for 24 h (%)	≤1@1600
5.	Compressive Strength(MPa)@10%Compression	≥0.15
6.	Thermal conductivity (W/mK)@1400 deg C	≤0.35@1400C
7.	Modulus Of Rupture (MPa)	≥0.5
8.	Alumina(%) Silica (%)	74(min) 25(min)
9.	Size of the board required(mm) (with minor variation)	900 x 600 x25

No. of boards required: 15

HIGH TEMPERATURE CEMENT

Technical Specifications

SL NO.	Description	Required Value
High Temperature cement of nominal composition 80 Alumina and 18 silica.		
Special Requirement		1. Ready to use with the high temperature insulation boards and blankets. 2. Compatible to **microwave radiation.** 3. Minimum shelf life of six months.
Product Application		To be used for joining different high temperature insulation boards and insulation blankets in a microwave furnace for heat treatment of ceramics at a temperature range of 1600-1650 deg. C.
1.	Continuous service Temperature requirement	1650 deg. C.
2.	Wet Density	≥1.7g/cc
4.	Shrinkage @1600 for 24 h (%)	≤0.3%@1600
4.	Alumina(%) Silica (%)	80(min) 18(min)

Quantity required: 20 Kg

1650C HIGH TEMPERATURE INSULATION BLANKETS

Technical Specifications

SL NO.	Description	Required Value
High Temperature insulation blanket of nominal composition 72 Alumina and 28 silica.		
Special Requirement		1. Compatible to **microwave radiation** throughout the temperature range(RT-1650 deg C) 2. Suitable for lining of high temperature insulation boards 3. Inert to organic vapors like polyvinyl alcohol and cellulose based binders
Product Application		To be used as a lining of different high temperature insulation boards and other repair work in a microwave furnace for heat treatment of oxide ceramics at a temperature range of 1600-1650 deg. C.
1.	Continuous service Temperature requirement	1600 deg. C.
2.	Density	≥.70g/cc
3.	Thermal conductivity (W/mK)@1400 deg C	≥0.60@1400C
4.	Loss of ignition @1600C for min 6 hours	≤1
5.	Shrinkage @1600 for 24 h (%)	≤4@1600
6.	Fibre Density	≥3.0g/cm³
6.	Alumina (%) Silica (%)	72 28
7.	Size of the blanket as one roll (mm) (with minor variations)	**7200 x 600 x 25**

Number of insulation rolls required: 2