

Industrial Equipment

Heat resistant and load-bearing boards can be for use in a wide range of industrial equipment such as heat presses, injection molders, etc as thermal insulation boards.

TOMBO™ No.6840-15/-20

HEMISUL™15/HEMISUL™20



HEMISUL™ is a 100% asbestos-free thermal insulation board that can be for use also as a cement board for electrical insulation. It has high mechanical strength, machinability, dimensional stability, and is for use in areas such as precision devices and many other industrial machines and so on.

Advantages

- High mechanical strength
- High thermal insulation and heat resistance
- Excellent machinability
- Homogeneous and monolithic board

Applications

- Thermal insulation boards for heat presses (for rubber, resin, etc.)
- Casings for induction heating furnaces
- Electrical insulation and thermal insulation materials for induction furnaces, switch boxes, etc.
- Base plates and support materials for the equipment
- Thermal insulation components for the equipment

※Please contact us for crystalline silica free Hemisul.



Physical Properties

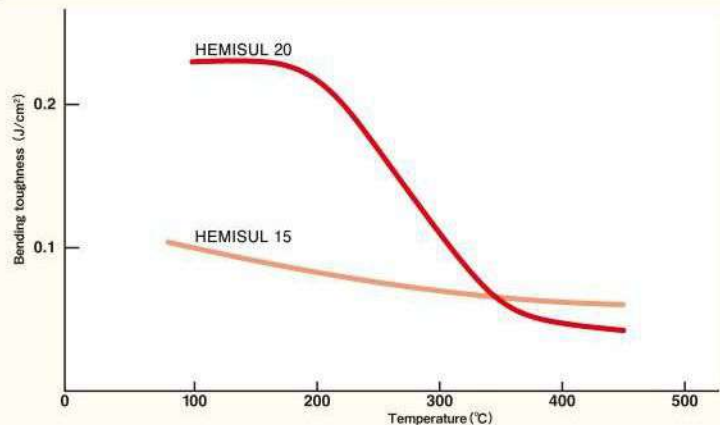
Properties	Unit	HEMISUL 15	HEMISUL 20
Maximum Service Temperatures	°C	500	500
Bulk Density	kg/m ³	1,750	1,700
Bending Strength			
100°C	MPa	29.5	27.5
200°C		—	26.5
350°C		23.6	23.6
500°C		21.6	20.6
Flexural Toughness			
100°C	J/cm ²	0.10	0.23
200°C		0.08	0.22
350°C		0.07	0.06 ^{※1}
Linear Heat Shrinkage			
200°C	%	—	0.1
350°C		0.2	0.2
500°C		0.3	0.3
Compressive Disrupture Strength			
100°C	MPa	108	144
Charpy impact			
100°C	J/cm ²	0.24	0.32
Volume Resistivity (After drying)	Ω-cm	10 ¹³	10 ¹⁴
Surface Resistivity (After drying)	Ω	10 ¹³	10 ¹³
Heat Resistance	°C	500	500 (250) ^{※2}
Thermal conductivity			
200°C	W/(m·K)	0.41	0.43
400°C	W/(m·K)	0.43	0.43
Appearance		Gray	

● These figures are test results and should not be used for specification purposes.

※1 : The figures of strength for each temperature are test results at room temperature after heating.

※2 : It can be used in temperatures higher than those shown in the above table in the case of partial exposure to heating.

Changes in toughness level of Hemisul during heating of entire surface



⚠ Cautions for handling the product

If using Hemisul for the first time or after not using it for a long time, it may have absorbed moisture. If it is suddenly heated from such a state, there is a possibility of fractures or deformation. In such cases, please fully dry it at a temperature of 100 to 150° C before use.

Also, if using it at high temperatures for a long time in a state where it comes into contact with oil, there is a possibility of fractures or deformation. If you intend to use it in such a situation, please consult Nichias beforehand.

Standard thickness, dimensions and packaging information

Industrial Equipment

TOMBO No.6840-15 **HEMISUL™15**

TOMBO No.6840-20 **HEMISUL™20**

Product Name	HEMISUL 15	HEMISUL 20
Standard working dimensions (mm)	900×1,210	
Standard Thickness (mm)	5,6,8,10,12,13,15,16 18,20,25,30,45,50,75	6,10,12,15,16,20,30

※ Maximum thickness of Hemisul 20 is 30 mm.

Actual dimensions of the board are 910mm×1220mm as molded.



Cautions for handling the products

1. Store these products in the original package and keep from water leakage in a cool and dark place to retain the designed performance.
2. Check on the SDS (Safety Data Sheet) regarding cautions on occupational health.
3. Comply with your local legislation in the case of disposal of these products.