MaxWool HPS & HTZ

Refractory Ceramic Blanket

Product Description:

MaxWool® high temperature insulating blankets are made from long strand spun, high purity ceramic fibers to form a strong, flexible needled product which provides superior insulation properties for usage at higher temperatures. The strong needling of the blanket results in a completely inorganic blanket with no binder that will result in smoke or flame. MaxWool is manufactured in two different temperature rated products depending on your application. **MaxWool®HPS** is rated to 2400°F (1300°C) and **MaxWool®HTZ** contains Zirconia Oxide, allowing usage up to 2600°F (1425°C). Both grades are available in a range of thicknesses and densities.

Typical Applications:

- **Petrochemical:** Reformers, Heaters & Furnace linings, Gaskets & Seals, Exhaust Ducts Insulation.
- **Power Generation:** Boilers, Turbine Covers, Expansion Joints, Removable covers, Cable trays.
- **Iron & Steel:** Process Furnace linings, Slow Cool, Soaking Pits, Ladle Covers.
- **Ceramic & Glass:** Kiln Linings, Car Insulation, Glass Furnace Crowns.
- **Others:** Structural Steel Fire Protection, Tank Car Fire Protection, Vehicle Exhaust Insulation & Heat Shield, Fire Barriers.

Key Performance Features:

- Low Thermal Conductivity
- Low Thermal Shrinkage
- Strong, High Tensile Strength
- Totally Inorganic
- Low heat Storage
- Resistant to Chemical Attack
- Flexible, lightweight
- Contains No Asbestos
- Thermal Shock Resistant
- Excellent Sound Absorption
- Easy to fabricate and Install
- Highly Heat Reflective

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Physical Properties:	**MaxWool® HPS**	**MaxWool® HTZ**
Color	White	White
Max Service Temp:	2400°F (1300°C)	2600°F (1425°C)
Operating Temperature	2300°F (1200°C)	2450°F (1400°C)
Shrinkage @ 2200°F/24 Hrs	0-3%	
Shrinkage @ 2400°F/24 Hrs		2%
Specific Heat (Btu/lbs/F)	0.27	0.27
Avg. Fiber Diameter	3-4 Microns	3-4 Microns

Chemical Composition: (%)

Al_2O_3	44-50	33-37
SiO_2	50-56	47-51
ZrO_2		13-19
Trace Elements	Less Than 1%	Less Than 1%
LOI	0	0

	MaxWool 4#	**MaxWool 6#**	**MaxWool 8#**	**MaxWool 10#**
Nominal Density, lb/ft3 (Kg/m3)	4 (64)	6 (96)	8 (128)	10 (160)

Thermal Conductivity

Mean Temperature	**Thermal Conductivity, BTU·in/hr·ft²·°F (W/m°K)**			
392°F (200°C)	0.42 (0.06)	0.42 (0.06)	0.38 (0.06)	0.37 (0.05)
752°F (400°C)	0.83 (0.12)	0.76 (0.11)	0.69 (0.1)	0.65 (0.09)
1112°F (600°C)	1.53 (0.22)	1.32 (0.19)	1.11 (0.16)	0.97 (0.14)
1472°F (800°C)	2.5 (0.36)	2.08 (0.30)	1.74 (0.25)	1.53 (0.22)
1832°F (1000°C)	3.75 (0.54)	3.05 (0.44)	2.43 (0.35)	2.08 (0.30)

Product Availability	**MaxWool® HPS**	**MaxWool® HTZ**
Density (PCF)	4,6,8,10	4,6,8,10
Thickness	½", 1",1 ½", 2"	½", 1", 1 ½",2"

Roll Length (Std per thickness)

½" 50 LF
1" 25 LF
1 ½" 12.5 LF
2" 12.5 LF

Standard Widths; 24" and 48" , custom widths available upon request.

Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. Please refer to the Product Safety Data Sheet (SDS) for recommended work practices and other product safety information.

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