



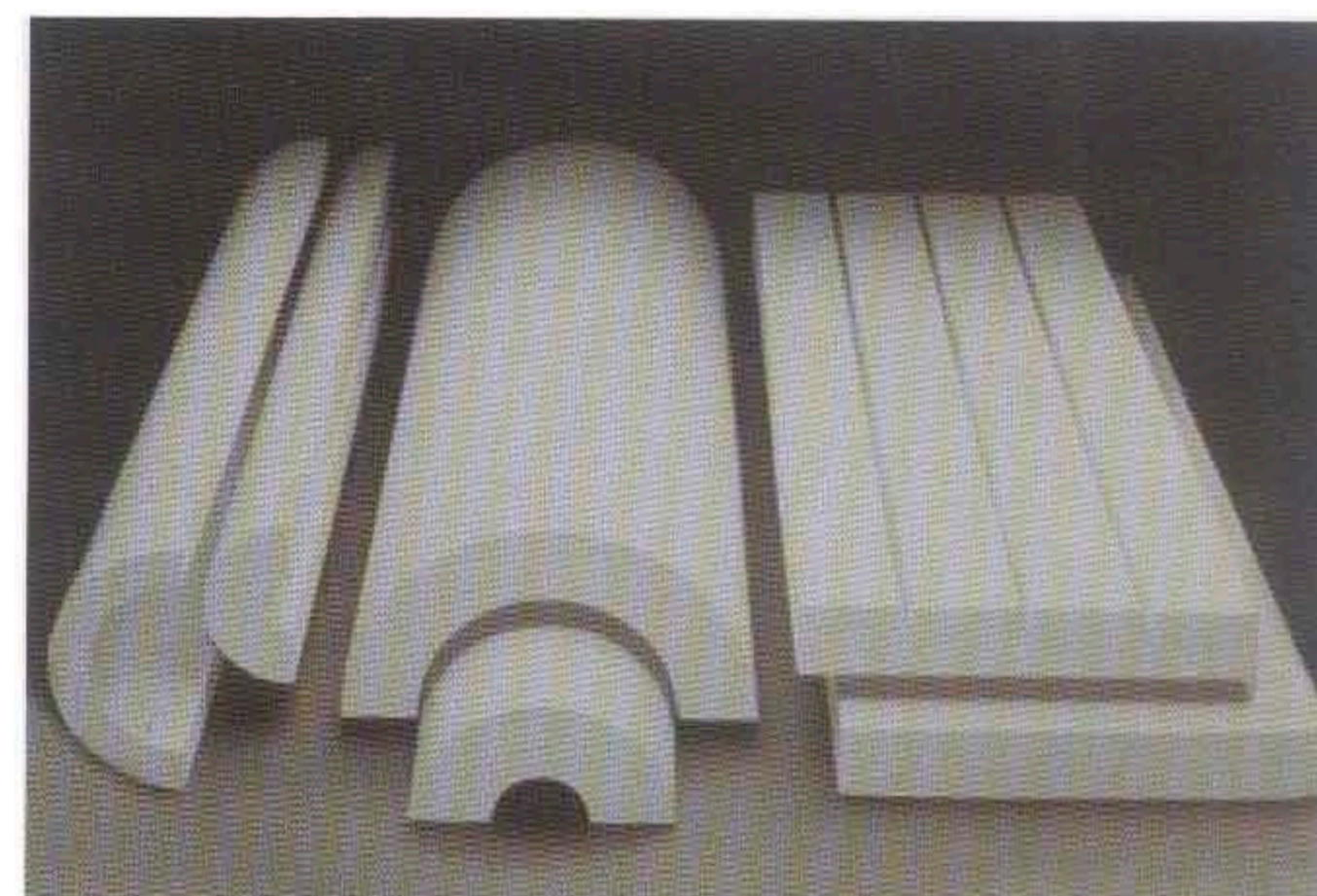
NATURE®

## Calcium Silicate Pipe & Block Insulation

### Data Sheet - 2

#### DESCRIPTIONS:

NTS calcium silicate is a molded, high temperature, abuse-resistant pipe and block insulation with exceptional structural strength, composed of hydrous calcium silicate for use on systems operating up to 1200°F (650°C). meets or exceeds the physical property requirements of ASTM C 533, Type I&GB/T10699-1998.



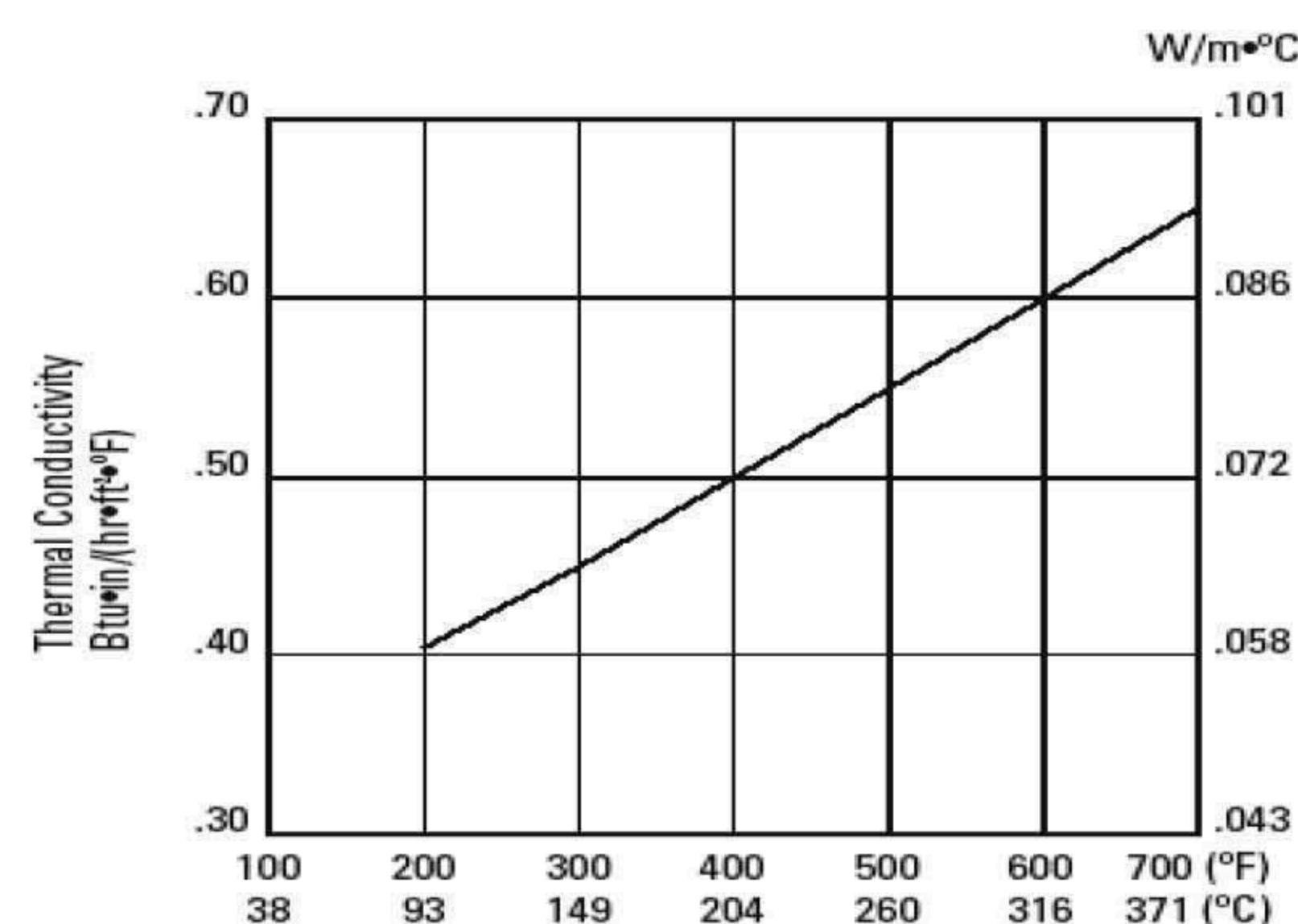
#### APPLICATIONS:

Because of its strength, low thermal conductivity and durability, it is the preferred product for application on high temperature piping and equipment. Nature is especially recommended for use in the petrochemical and power generation industries where pipe and equipment operate up to 1200°F (650°C). Nature pipe insulation is 24" (600mm) in length, and is available in thicknesses from 1" to 3" (25 mm to 75mm) in ½"(13 mm) increments. Thick wall material is furnished in double layers. Nature flat block insulation is 24" (600mm) wide and 12" (300mm) in length, and is available in thicknesses from 1" to 4" (25 mm to 102 mm) in ½ " (13 mm) increments.

#### PHYSICAL PROPERTY REQUIREMENTS

Density (Dry) Average	13.75 lbs. per cu. ft.
ASTM C 302	(220 kg/m3)
Flexural Strength	50 psi (344 kPa)
ASTM C 203	
Compressive Strength	100 psi (690 kPa)
ASTM C 165	to Produce 5% Compression
Abrasion Resistance	After First 10 Min. - 15
(% Weight Loss by Tumbling)	After Second 10 Min. - 30
ASTM C 421	
Linear Shrinkage	Less Than 2 .0% After 24-hr.
ASTM C 356	Soaking Period at 1200°F (650°C)
Max. Service Temperature	1200°F (650°C)
ASTM C 411	
Surface Burning Characteristics	Flame Spread - 0
ASTM E 84	Smoke Developed – 0

#### THERMAL CONDUCTIVITY ("K")



Mean °F	200	300	400	500	600	700
Temperature °C	93	149	204	260	316	371
Btu•in/(hr•ft²•°F)	.41	.45	.50	.55	.60	.65
W/m•°C	.059	.065	.072	.079	.086	.094

#### NATURE THERMAL & ACOUSTIC INSULATION CO., LTD.

Add: Chengqiao Industrial Park, Liuhe District, Nanjing City, Jiangsu, China, 211500  
Tel: +86 25 58361891 / 68662986 Fax: +86 25 68650229  
Website: www.naturescaffold.com E-mail: info@naturescaffold.com