CALCIUM SILICATE INSULATION

Calcium Silicate Insulation supplied by DTS is the microcellular structured inorganic rigid and super-light heat insulation material mainly composed of inorganic siliceous and calcium and made by special technology such as the hydrothermal reaction under high temperature and high pressure etc. And it's the national inspection-free product that has firstly won the ISO9001 certification in the same industry. It can still maintain the high insulating effect at 650℃ and is advantageous in the stability of coping with temperature changes. With super-low chloride ion content, it can provide very nice protection on pipelines, and is prefabricated to shape up, greatly extending the service life. Additionally, the company has kept upgrading product technology to improve product, reducing the product density from 220kg/m^3 to 180kg/m^3 while maintaining its strength, thus reducing the thermal conductivity from 0.065 to 0.049.

ADVANTAGES

- Asbestos Free

  Made from algous fossil from hundreds of millions of years ago, the product is entirely asbestos-free and non-poisonous to human body.

- Superior Strength

  With similar density, the strength of this material is the highest among all the inorganic rigid insulation materials with better compressive performance and is not easy to bend.

- Good Anti-corrosion

  The super low chloride ion content and alkalescence have good protection for metal pipes, which greatly prolongs the service life of pipes and equipment and greatly reduces maintenance cost, bringing lasting protection and better durability.

- Excellent Non-combustibility

  The product passed the Laboratory certificate test and has been identified as non-combustible material.

- Good Stability

  Long time soaking in water will not lead to pulverization. Various performance remains stable after drying.

Applicable Scope

It's applicable to equipment and pipeline facilities in petroleum refinery, chemical industry, hydroelectricity, nuclear power, thermal power and city heat supply network.

Technical Data

PROPERTIES		UNIT	ASTM C533	EGB 10699	SUPPLIED MATERIAL
Density		Kg/m3	≤250	≤220	220
Maximum Service Temperature		℃	650	650	650
Thermal Conductivity per ASTM C518/C1114	(50℃)	W/m.k	≤0.060		≤0.052
	(93℃)		≤0.065	≤0.065	≤0.0535
	(100℃)			≤0.065	
	(149℃)		≤0.072		≤0.054
	(200℃)		≤0.079	≤0.077	≤0.056
	(260℃)		≤0.087		≤0.0757
	(300℃)			≤0.088	
	(371℃)		≤0.102		≤0.0923
	(400℃)			≤0.106	
	(500℃)			≤0.127	≤0.098
	(538℃)		≤0.111		≤0.1002
Linear Heat Shrinkage per ASTM C 356		%	≤2.0	≤2.0	≤1.3
Flexural Strength per ASTM C 203		MPa	≥0.344	≥0.30	≥0.36
Compressive Strength per ASTM C 165		MPa	≥0.689	≥0.45	≥0.85
Weight Loss by Tumbling per ASTM C 421(First 10 minutes)		%	≤20		≤10
Weight Loss by Tumbling per ASTM C 421 (Second 10 minutes)		%	≤40		≤20
Hot Surface Performance per ASTM C 411 (650℃)		CM	≤0.635 (No through-cracking)		≤0.635 (No through-cracking)
Surface Burning Characteristics per ASTM E841	Flame Spread Index		0		0
	Smoke Developed Index		0		0
Moisture Content per ASTM C 1616		%	≤20		≤4
Non-Combustible Property per ASTM E 136			Pass		Pass
Chlorine Content			ASTM C795		ASTM C795

Item	Slab	Curved	Pipe
Length(mm)	600	600	600
Width(mm)	300/150	150/100	0.5"- 60"(inside diameter)
Thickness(mm)	25-100	25-100	25-100

PACKING

Packed in standard export cartons with plastic bags inside used for waterproofing.

Carton Size：580(L)*320(W)*620(H)mm, 40HQ：576BOXES, 20HQ：252BOXES.

Pallets can be made according to customers' requirements. Standard sizes showed as above. For further information, including nonstandard sizes, please contact us.