



Create the Value, Achieve the Brand

Application





Ceramic Fiber Blanket

Puride ceramic fiber blanket is produced from high strength ceramic fibers, by "blown" or "spun" process. the strong, lightweight and durable blanket perform a superior function in heat insulating and sound absorbing.

Technical data:

Item	Common	Standard	H Pure	H Alumina	Zirconium
AL ₂ O ₃ (%)	44	46	47-50	52-55	39-40
Fe ₂ O ₃ (%)	1.2	1.0	0.2	0.2	0.2
ZrO ₂ (%)	—	—	—	—	15-19
Classification Temperature (°C)	1100	1260	1260	1360	1430
Working Temperature(°C)	1000	1050	1100	1200	1350
Density (kg/m ³)	96/128	96/128	96/128	128/160	128/160
Permanent linear shrinkage(%)(after 24 hours, density 128kg/m ³)	-4 (1000°C)	-3 (1000°C)	-3 (1100°C)	-3 (1250°C)	-3 (1350°C)
Tensile strength (Mpa) density 128kg/m ³)	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12

Features:

- 1.Low thermal conductivity
- 2.Very low heat storage
- 3.Very high tensile strength
- 4.Thermal shock resistance
- 5.Good sound absorption
- 6.Inorganic and no asbestos

Application:

Furnace repair
 Furnace, kiln, reformer and boiler linings
 Furnace door linings and seals
 Reusable insulation for steam and gas turbines
 High-temperature kiln and furnace insulation
 Primary reformer heater insulation
 High temperature gasketing
 Expansion joint seals
 Glass furnace crown insulation
 Field steam generator lining
 Nuclear insulation applications
 Thermal reactor insulation
 Flexible high temperature pipe insulation
 Investment casting mold wrapping
 Removable casting mold wrapping
 Removable insulating blankets for stress relieving welds
 Pressure and cryogenic vessel fire protection
 Soaking pit seals
 High temperature filtration
 Incineration equipment and stack linings



Ceramic Fiber Module

Puruide ceramic fiber module is made from ceramic fiber blanket under compression, to improve the performance of thermal insulation when being used in special thermal conditions.

With the anchoring system, the ceramic fiber module can be installed in an easy and quick way.



Features

1. Fast and easy installation
2. Lower heat storage and fuel costs
3. Excellent mechanical strength
4. High temperature stability
5. Lightweight & Asbestos free

Application

Porcelain furnace and door lining
Boiler insulation
Stack lining
Ethylene furnace roof and walls
Pyrolysis furnace lining
Heat treat furnace
Glass tempering furnace

Technical Data

Item	Common	Standard	H Pure	H Alumina	Zirconium
AL ₂ O ₃ (%)	44	46	47-50	52-55	39-40
Fe ₂ O ₃ (%)	1.2	1.0	0.2	0.2	0.2
ZrO ₂ (%)	—	—	—	—	15-19
Classification Temperature (°C)	1100	1260	1260	1360	1430
Working Temperature (°C)	1000	1050	1100	1200	1350
Density (kg/m ³)	220±15	220±15	220±15	220±15	220±15
Permanent linear shrinkage(%) (after 24 hours, density 128kg/m ³)	-4 (1000°C)	-3 (1000°C)	-3 (1100°C)	-3 (1250°C)	-3 (1350°C)

Ceramic Fiber Board

Purified ceramic fiber board is the lightweight refractory material, being processed with alumina-silica fibers for applications at temperatures up to 1430°C (2600°F).

The ceramic fiber board is featured with high temperature stability, low thermal conductivity, consistent density, and excellent resistance against thermal shock and chemical attack.



Features:

- Low thermal conductivity and Low shrinkage
- Strong pressure strength
- Good erosion resistance
- Smooth surface and Lightweight
- Low impurity, even bulk density and thickness
- Excellent mechanical and structural strength
- High plasticity to make complex shape
- Lightweight and easy to cut or install
- Shorter heat up and cool down time
- Asbestos free

Applications:

- Insulating backup to brick & castable
- Furnace hot face lining
- Use in industrial heat process equipment
- High temperature gasket & seals
- Flue & chimney linings in furnace & kilns
- Molten metal trough covers
- Expansion joint Industrial heat shields & thermal barriers
- Industrial combustion chamber construction
- Infra red element supports
- Board over blanket hot face lining
- Full thickness refractory lining
- High temperature boiler wall insulation
- Pouring forms for castable

Technical Data

Item	Common	Standard	H Pure	H Alumina	Zirconium
AL ₂ O ₃ (%)	44	46	47-50	52-55	39-40
Fe ₂ O ₃ (%)	1.2	1.0	0.2	0.2	0.2
ZrO ₂ (%)	—	—	—	—	15-19
Classification Temperature (°C)	1100	1260	1260	1360	1430
Working Temperature (°C)	1000	1050	1100	1200	1350
Density (kg/m ³)	260/320	260/320	260/320	260/320	260/320
Permanent linear shrinkage(%) (after 24 hours, density 128kg/m ³)	-4 (1000°C)	-3 (1000°C)	-3 (1100°C)	-3 (1250°C)	-3 (1350°C)
Tensile strength (Mpa) density 128kg/m ³	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12

Ceramic Fiber Paper

Puruide ceramic fiber paper consists primarily of high purity alumina-silicate fiber and is made through a fiber washing process. It offers high temperature resistance, very low thermal conductivity, chemical corrosion resistance and thermal shock stability.



Features:

- Lightweight
- Easy to wrap, shape or cut
- Excellent corrosion resistance
- Excellent thermal shock resistance
- Excellent chemical stability and machining property
- Low thermal conductivity; Low heat storage
- Good uniformity and smooth appearance
- Good flexibility and toughness and resistance to erosion
- Good dielectric strength and sound insulation

Applications:

- Appliance heat seals
- Parting plane in refractory linings
- Combustion chamber liners
- Backup lining for metal troughs
- Hot top linings
- Thermal and electrical insulation
- Refractory backup insulation
- Coke oven door shock absorption medium
- Kiln car deck covering

Technical data

Grade		Standard	High Pure	High Aluminum	Zirconium
Max. Temperature (°C)		1050	1150	1260	1430
Shrinkage on Heating (%)		800°C X 24h ≤ -3	1000°C X 24h ≤ -3	1280°C X 24h ≤ -3	1400°C X 24h ≤ -3
Organic Content (%)		≤ 5	≤ 5	≤ 5	≤ 5
Thermal conductivity by mean temp. (W/m.k.) (250kg/m³)	200°C	0.055~0.065		0.060~0.070	
	400°C	0.110~0.120		0.105~0.125	
	600°C	0.160~0.170		0.170~0.180	
Chemical Composition (%)	Al ₂ O ₃	43	47	55	38
	SiO ₂	53	51	44	44
	Fe ₂ O ₃ + Ti ₂ O ₃	≤ 1.2	≤ 0.3	≤ 0.3	≤ 0.2
	CaO + MgO	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.2
	NaO + KO ₂	≤ 0.5	≤ 0.3	≤ 0.3	≤ 0.2
Density (kg/m³)		170~230			

Ceramic Fiber Textile

Puruide ceramic fiber textile includes ceramic fiber ropes, braids, cloth, tapes & sleeving. All are made from alumina-silica ceramic fiber, free of asbestos & silica. They can be used for high temperature applications up to 2300°F.



Applications:

Furnace door insulation and seal
Coke oven door jam seal
Maintenance in aluminum plants
Foundries, refineries and power plants
Expansion joint packing
Gasket for vacuum degassing of steel
During pouring
High temperature gasketing and packing
Tadpole gasket bulb cord
Expansion join packing in boilers and furnaces
Wood burning stove door seal
Glass furnace truck stone seal

Features:

Good compression strength.
Non-toxicity, environmental protection.
Low thermal conductivity and low thermal capacity.
Good antacid oil resistance and water vapor resistance.

Technical data

Item	Cloth	Tape	Round rope	Square rope	Twisted Rope
Classification Temp °C	1260				
Bulk Density kg/m ³	500±30				
Organic Content	≤ 15				
Working Temp	450(Glass fiber Filament)				
	1000(Metal Wire)				
Loss After Firing(800°C)%	12±2	12±2	12±2	12±2	12±2
Size	30mx1mx2 30mx1mx3	widen10- 120mm length30m	Φ6-50mm	20x20	Φ6-50mm



Ceramic Fiber Bulk

Puride ceramic fiber bulk is manufactured from high quality raw materials such as flint clay , alumina, silica sand through blow or spun production techniques, which has ensured the outstanding thermal insulation and flexibility in refractory linings and insulation tools. It's also the basic material for the ceramic fiber blanket, felt, board and paper, etc.

Features:

Excellent thermal stability and chemical stability
Keep loose ,soft and elastic under high temperature,
Low thermal conductivity and heat storage
Excellent thermal shock resistance
No bond and corrosive material
Excellent sound absorption performance



Application:

Tube seals
Expansion joints
Chimney insulations
Base material for the ceramic fiber blanket, board and paper, etc.
Filling material for expansion gap or short-term heat insulation mending
Fiber strengthen material for heat insulation and bonding agent



Technical Data

Type	Common	Standard	High Pure	High Aluminum	Zirconium
Classification temp(°C)	1100	1260	1260	1360	1430
Work temp(°C)	<1000	1050	1100	1200	1350
Color	White	Pure White	Pure White	Pure White	Pure White
Fiber diameter(um)Blown	2--3	2--3	2--3	2--3	2--3
Fiber diameter(um)Spun	3—4.5	3—4.5	3—4.5	3—4.0	3—4.0
Al ₂ O ₃ (%)	44	46	47--49	52--55	39--40
Al ₂ O ₃ +SiO ₂ (%)	96	97	99	99	-----
Al ₂ O ₃ +SiO ₂ +ZrO ₂ (%)	-----	-----	-----	-----	99
ZrO ₂ (%)	-----	-----	-----	-----	15--17
Fe ₂ O ₃ (%)	<1.2	<1.0	0.2	0.2	0.2
Na ₂ O+K ₂ O(%)	<=0.5	<=0.5	0.2	0.2	0.2

Ceramic Fiber Formed Shapes

Purified ceramic fiber formed shapes are made from aluminum silicate fiber, by means of vacuum suction-straining and dry process. These shapes are different due to the raw materials: common, standard, high pure, high alumina and zirconium-contained aluminum silicate fiber. The ceramic fiber formed shapes are with superior high-temperature performance and self-support strength, being used in certain industrial sector.



Features

- Asbestos free
- Lightweight
- Low thermal conductivity saves fuel
- Low heat storage, reduces cycle times
- Excellent thermal shock
- Resistance resistant to hot gas erosion
- Resists most chemical attacks
- Resists penetration by molten aluminum and other non-ferrous metals

Applications

- Tundishes, melting crucibles and hot tops for alloy melting
- Heat insulation for industrial heaters
- Small furnaces
- Riser sleeves for foundries
- Head boxes and launders for continuous sheet casting
- Die casting ladles
- Combustion chambers

Technical data

Descriptions		Common	Standard	H Pure	H Alumina	Zirconium
Classification temperature (°C)		1260	1260	1300	1400	1430
Operating temperature (°C)		<1000	1000	1150	1260	1350
Density (kg/m ³)		250	250	250	250	250
		350	350	350	350	350
The chemistry constitute(%)	Al ₂ O ₃	44	45	47—49	52—55	39—40
	ZrO ₂					15-17

Rockwool Board

Puride rockwool board is made of select fine basalt as the major materials which is pulled into 4 - 7 μ m non-continuous fibers after melted by adopting advanced international four roller centrifugal cotton - making procedures and adding a certain of adhesives, dust laying oil and water repellent into rock wool fibers. It can be made into products series with different density according to various uses through the technology of sedimentation, solidify, cutting and etc.



Application:

Petrochemical industry-- heat insulation and sound absorption of equipments for petroleum industry, power industry and chemical industry.

Construction industry-- building's exterior wall, partition wall, curtain wall, roof and building envelope thermal insulation and acoustic noise reduction.

Mining industry-- heat preservation and fireproof for industrial kiln, oven, large storage tank and shipping.

Technical Data:

Shot content (particle diameter ≥ 0.25 mm), %	≤ 10.0
Average fiber diameter, μ m	≤ 7.0
Density tolerance, %	+10, -10
Thermal conductivity coefficient (average temperature: 70 $\pm$ 52), W/(m. K)	≤ 0.039
Thermal load contraction temperature (products with density above 60kg/m ³),	≥ 720
Moisture content, %	≤ 0.2
Combustion property	Non-combustible
Organic material content, %	≤ 3.0
Water repellence(water-proof),%	≥ 98
Water absorption(water-proof),%	≤ 5
Compressive strength (With 10% deformation) , KPa	≥ 40
Delamination strength, KPa	≥ 7.5

Calcium Silicate Board

Puruide calcium silicate board is a light weight, high quality building material. It's a composite material made of sand, cement and cellulose fibers, etc. Some materials are from the recycling powder or power plant waste powder, therefore, it is Green-Label product. Due to the high temperature and pressure autoclaved process, it is very durable and stable.

Features:

- Asbestos free
- Non-combustible
- Moisture resistant
- Excellent impact resistance
- Heat and sound insulation
- Excellent fire prevention performance
- Easy and speedy construction
- Durable with long use life
- Environmental friendly



Technical Data:

Items	Unit	Standard Type				GB/T10699-1998	JISA9510-1995 NO.1-22
		HCS-17	HCS-20	HCS-23	HCS-25		
Bulk Density	kg/m ³	170 (±10%)	200 (±10%)	230 (±10%)	250 (±10%)	≤220, ≤270	≤220
Flexural Strength	MPa	≥0.25	≥0.35	≥0.45	≥0.50	≥0.30	≥0.30
Thermal Cond	W/m.k	0.058 100°C	0.062 100°C	0.067 100°C	0.069 100°C	≤0.065 (100°C)	≤0.062 (70°C)
Temp. Limit	°C	1000	1000	1000	1000	1000	1000
Linear Shrinkage	%	≤2 (1000°C,16rs)	≤2 (1000°C,16hrs)	≤2 (1000°C,16hrs)	≤2 (1000°C,16hrs)	≤2 (1000°C,16hrs)	≤2 (1000°C,3hr)

Items	Unit	High Temp. Type SCS-25
Bulk Density	kg/m ³	250±10%
Flexural Strength	MPa	≥0.50
Temp. Limit	°C	1100
Linear Shrinkage	%	≤2(1050°C,3hrs)
Thermal Cond	W/m.k	≤0.069 100°C

Notes: Products with max. service temp. of 650°C are also available.

High Silica Fiberglass Cloth

Puruide high silica fiberglass cloth is made from a kind of high temperature resistance, inorganic fiber that contents more than 96% of SiO₂. The softening point is close to 1700°C and it can be used under 900°C situation for a long time. The fabric is characterized by its resistance to fire, heat, electricity and corrosion. It is widely used in fireproofing and fire fighting industry, etc.

Features:

- Low thermal conductivity
- Good chemical stability
- Good electrical insulation
- Low thermal shrinkage
- Non-asbestos product without pollution
- Good process performance



Application:

- High temperature resistant, insulation and sealing material
- High temperature ablation resistant material
- Fireproof material (for fireproof protective clothe, fireproof curtain, fire blanket)
- Dust collecting in media of high temperature gas and filtration in media of high temperature liquid
- Distinguisher, insulation material, filtration of automobile and motorcycle
- Filter for molten metal
- Protective material for welding
- Electricity insulation material

Technical Data:

Product code	Thickness(mm)	Width(mm)	Content of the SiO2(%)	Woven organization
LA-100	0.10	80-90	≥96%	Plain
LA-260	0.26			Plain
LA-600	0.72	80-1200		Satin
LA-1250	1.35			Satin

Foam Glass

Purified foam glass is made by heating to fusion finely ground glass powder with a pore-forming material, such as coke, chalk, or dolomite. With a structure of equally closed cells, it is a good thermal and acoustic insulator and is easily worked and cemented.

Features:

- Inflammable
- Easy for cutting
- Mold resistant
- Corrosion free
- Humidity resistance
- High strength
- Stable physical and chemical performance and stable dimension

Applications:

- Low-temperature piping, equipment and tanks(for storage)
- Low-temperature system for hydrocarbon processing
- Refrigerated warehouse and chilled construction
- Low-temperature insulated system for pharmaceutical Industry
- Steel storage tanks and piping for liquid oxygen and nitrogen
- Underground steam and cooling water piping
- Chimney lining
- Offshore oil platform
- Production system for hydrocarbon compounds
- Insulation for exterior and interior walls
- Waterproofing and insulation for roofs
- Steel plate roofing
- Insulation for thermal bridges
- Condensate piping for centralized air conditioning
- Site trench for industrial factories
- Base for hanging gardens



Technical Data:

Item		numeral(standard/reality)	item		numeral(standard/reality)
Density	Kg/m ³	≤160/147	compression strength	Mpa	≥0.3/0.8
Heat Conductivity	(25°C)W/m.k (0°C)W/m.k	≤0.052/0.050 0.0466	bending strength	Mpa	0.3/0.8
Working temp		-200~450	moisture rate	%	0.00
water absorption	%	≤0.5/0.2	coefficient of linear expansion	cm/cmc	9×10-6/8.5×10-6

Packing & Loading



