

ISOLITE® ISOWOOL CERAMIC FIBER

ISOWOOL is a ceramic fiber made from the purest of raw materials, which are electromelted, air-blown at high speed and fiberized. Light in weight and soft to the touch, ISOWOOL possesses excellent refractory and insulating properties.

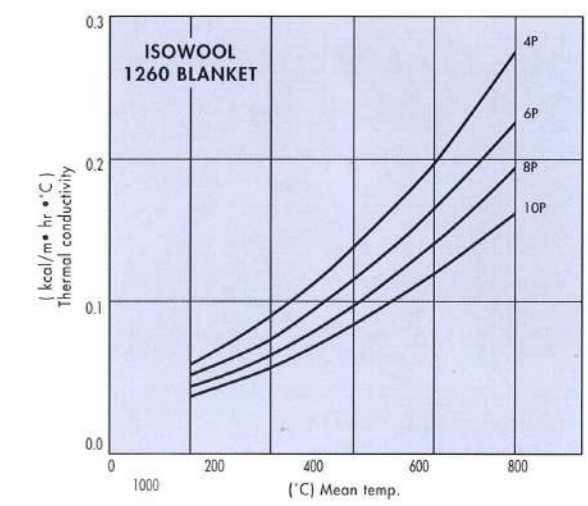
It sees extensive application in such key industries as steel, nonferrous, petrochemical and ceramic. Not only that, but it finds wide use also for seals, for fillers, for filters and as reinforcing fiber of various composites.

GENERAL PROPERTIES

	ISOWOOL 1260	ISOWOOL 1400	ISOWOOL 1500	
Classification temperature(°C) (°F)	1260 2300	1400 2600	1500 2800	
Melting point (°C)	1760	1700	1760	
Fiber diameter (µm)	2.8	2.8	2.6	
Fiber Length (mm)	~ 250	~ 250	~ 150	
Specific gravity	2.6	2.8	2.65	
Chemical analysis (%)	Al ₂ O ₃	47.1	35.0	40.0
	Si O ₂	52.3	49.7	58.1
	Cr ₂ O ₃	—	—	1.8
	Zr O ₂	—	15.0	—

* patented products

THERMAL CONDUCTIVITY



ISOWOOL - RELATED PRODUCTS

Products	Classification temperature	Remarks	Catalog
TRIPLE - T	1260 ~ 1600 °C (2300 ~ 3000 °F)	900x600x6, 12.5, 25mm (space filler, expands on heating)	KT - 10
TEX - 10	1000 °C (1900 °F)	Silica fiber textiles (cloth, tapes, sleeves)	Leaflet
TEX - 14	1400 °C (2600 °F)	3M (USA) NEXTEL textile products (cloth, tapes, sleeves)	Bulletin - 194
SAFFIL	1600 °C (3000 °F)	ICI (UK) alumina fiber products (bulk, LDM, paper)	Leaflet
KAOSTICK	1400 °C (2600 °F)	Inorganic cement, 25kgs / tin ...for Unifelt veneering	Bulletin - G03E
NEOKOTE	1000 ~ 1450 °C (1900 ~ 2650 °F)	Unifelt surface coating material, 20kgs / paper bag	Bulletin - G03E
RIGIDIZER	1200 °C (2200 °F)	Rigidizer for ceramic fiber, 5 kgs & 20kgs / metal can	Bulletin - 186

	Products	Classification temperature	Bulk density (kg/m ³)	Thermal conductivity (Kcal / mh°C)				Thermal conductivity (W/m.k)				Reheat change (%) (at°C x 24hrs)	Binder		Standard size (mm)	Typical applications	Remarks		
				400°C	600°C	800°C	1000°C	400°C	600°C	800°C	1000°C		Organic	Inorganic					
BULK	▲ 1260 BULK	1260°C (2300°F)	60 ~ 200 (Pack density)	pack density 190kg/m ³	0.07	0.10	0.14	0.20	0.08	0.12	0.16	0.23	-----	-----	-----	5kg carton / 15kg carton	Expansion joint filler	Other forms of Bulk available	
	▲ 1400 BULK	1400°C (2600°F)	60 ~ 200 (Pack density)	pack density 190kg/m ³	0.07	0.10	0.14	0.20	0.08	0.12	0.16	0.23	-----	-----	-----	5kg carton / 15kg carton	Material for various composites		
BLANKET	▲ 1000 BLANKET	1000°C (1900°F)	96 (6P) , 128 (8P)	(8P)	0.08	0.13	0.19	0.27	0.09	0.15	0.22	0.31	-----	-----	-----	7200 x 600 x 25 / 3600 x 600 x 50	Furnace linings	Following have Construction Ministry approval as incombustible material 1000 Blanket (approval NO.1518) 1260 Blanket (approval NO.1519)	
	▲ 1260 BLANKET	1260°C (2300°F)	64 (4P) , 96 (6P) 128 (8P) , 160 (10P)	(8P)	0.06	0.10	0.14	0.20	0.08	0.13	0.20	0.23	-1.3 (1000°C), -1.8 (1100°C)	-----	-----	7200 x 600 x 6, 12.5, 25 / 3600 x 600 x 50 1200 x 600 x 6, 12.5, 25	Heat seals Packing		
	1260 ACE BLANKET	1260°C (2300°F)	128 (8P) , 160 (10P)	(8P)	0.06	0.10	0.14	0.20	0.07	0.12	0.16	0.23	-1.3 (1000°C), -1.8 (1100°C)	-----	-----	7200 x 600 x 6, 12.5, 25	Fire protection		
	▲ 1400 BLANKET	1400°C (2600°F)	96 (6P) , 128 (8P) 160 (10P)	(8P)	0.07	0.11	0.17	0.25	0.08	0.13	0.17	0.29	-1.5 (1200°C), -2.5 (1300°C)	-----	-----	7200 x 600 x 6, 12.5, 25	Noise reduction Filter material		
	▲ 1500 BLANKET	1500°C (2800°F)	128 (8P) , 160 (10P)	(10P)	-----	0.09	0.13	0.18	-----	0.10	0.15	0.21	-1.6 (1300°C), -2.0 (1400°C)	-----	-----				
	1600 BLANKET	1600°C (3000°F)	96 (6P) , 128 (8P)	(6P)	-----	0.08	0.12	0.16	-----	0.09	0.14	0.19	-0.6 (1400°C), -0.5 (1500°C)	-----	-----	3600 x 620 x 25			
PAPER	1260 PAPER	1260°C (2300°F)	315		0.08	0.11	0.15	-----	0.09	0.13	0.17	-----	-----	0	-----	18m x 600 x 1.0 18m x 600 x 2.0	Heat seals Packing Elec. appliance and heating apparatus insulation	1200mm not regular width to be made to order.	
	1260 ACE PAPER	1260°C (2300°F)	160		0.06	0.09	0.12	0.17	0.07	0.10	0.14	0.20	-----	-----	-----	30m x 600 x 2.5	Filter material		
	1500 ACE PAPER	1500°C (2800°F)	160		-----	0.08	0.12	0.16	-----	0.09	0.14	0.19	-----	-----	-----	30m x 600 x 2.5	Asbestos paper substitute		
BOARD	1000 BOARD	1000°C (1800°F)	250		0.07	0.11	0.17	-----	0.08	0.13	0.20	-----	-0.3 (800°C), -1.3 (900°C)	0	0	900 x 600 x 20	High temp. furnace linings	1000 Board has incombustible (approval NO.1868) from Construction Ministry. Available also are fired products from which smoke and odor at initial heat-up removed.	
	▲ 1260 BOARD	1260°C (2300°F)	250		-----	0.08	0.12	0.16	-----	0.09	0.14	0.19	-0.8 (900°C), -1.1 (1000°C)	0	0	(Available 5~50mm thick, in addition of 5mm)	Elec. furnace lining, back-up		
	▲ 1400C BOARD	1400°C (2600°F)	250		-----	0.10	0.14	0.20	-----	0.12	0.16	0.23	-0.8 (1100°C), -1.4 (1200°C)	0	0		Fire protection		
	* 1600 BOARD	1600°C (3000°F)	180		-----	0.10	0.14	0.20	-----	0.12	0.16	0.21	-0.7 (1300°C), -1.2 (1400°C)	0	0				
	* 1600HA BOARD	1600°C (3000°F)	200		(800°C) 0.11 (1000°C) 0.14 (1200°C) 0.18 (1400°C) -----				(800°C) 0.13 (1000°C) 0.16 (1200°C) 0.21 (1400°C) -----					+ 0.4 (1600°C)	0	0	(1700HA BOARD)		
	* 1700HA BOARD	1700°C (3100°F)	300		0.10 0.12 0.15 0.18				0.12 0.14 0.17 0.21					-0.6 (1700°C)	-----	0	900 x 600 x 25		
	H BOARD	LT 1000°C (1900°F)	1000		0.24 0.26 0.29 0.35				0.28 0.30 0.34 0.41					-1.4 (900°C)	0	0	600 x 300 x 10, 15, 20, 25		Furnace floor lining
	MT 1100°C (2000°F)	1000		0.24 0.26 0.29 0.35				0.28 0.30 0.34 0.41					-1.4 (1000°C)	0	0		Back-up insulation for ladle and tundish		
	* HT 1400°C (2600°F)	1000		0.26 0.29 0.32 0.37				0.30 0.34 0.37 0.43					-0.6 (1200°C)	0	0		Heat barrier plate		
	HMT 1400°C (2600°F)	1500		0.49 0.52 0.55 0.63				0.57 0.60 0.64 0.73					-3.4 (1200°C)	0	0				
TEX-12	YARN	1260°C (2300°F)			-----	-----	-----	-----	-----	-----	-----	-----	-----	0	-----	Ø2, Ø3	Pipe and duct insulation	Reinforcement materials: Glass yarn (G) or Stainless Steel wire (S). Smokefree treated products also available	
	CLOTH	1260°C (2300°F)	1000g/m ² (SI) 850g/m ² (SI)(Smoke free)		-----	-----	-----	-----	-----	-----	-----	-----	-----	0	-----	30m x 1000 x 2.0 or 1.8 (Smoke free)	heat barrier curtain weld splash protection		
	TAPE	1260°C (2300°F)			-----	-----	-----	-----	-----	-----	-----	-----	-----	0	-----	30m x 25, 50 75, 100x2.0 or 1.8	woven asbestos substitute heat seals		
	ROPE	1260°C (2300°F)	310 (Before heating)		-----	-----	-----	-----	-----	-----	-----	-----	-----	0	-----	Diameter 6~50	packing		
FELT	1260 FELT	1260°C (2300°F)	160		0.07	0.11	0.15	0.21	0.08	0.13	0.17	0.24	-1.1 (1000°C)	0	-----	900 x 600 x 20	Furnace back-up insulation	Construction Ministry incombustible (approval NO.1777)	
	1400 FELT	1400°C (2600°F)	160		0.07	0.11	0.15	0.21	0.80	0.13	0.17	0.24	-1.4 (1200°C)			(Available 5~50mm thick, in addition of 5mm)	Heat seal		
	* 1600 FELT	1600°C (3000°F)	130		-----	0.11	0.16	0.23	-----	0.13	0.19	0.27	-1.5 (1400°C)				Packing		
	▲ WET FELT	1200°C (2200°F)	350 (105°C After dried)		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	600 x 300 x 3, 6, 12.5, 19, 25	Lining of velocity proof furnaces		
BLOCK	▲ 1260 UNIFELT-B	1260°C (2300°F)	130		0.09	0.13	0.19	0.27	0.10	0.15	0.22	0.31	-1.5 (1200°C)			300 x 300 x 50, 75, 100	Insulation veneering of furnaces in such industries as steel, non-ferrous, petrochemical, ceramic		
	▲ 1400 UNIFELT-B	1400°C (2600°F)	160		0.08	0.12	0.17	0.24	0.09	0.14	0.20	0.28	-1.2 (1300°C)			300 x 150 x 50, 75, 100			
	▲ 1500 UNIFELT-B	1500°C (2800°F)	160		0.08	0.11	0.15	0.21	0.09	0.13	0.17	0.24	-0.4 (1400°C)			200 x 200 x 50, 75, 100			
	* 1600 UNIFELT-B	1600°C (3000°F)	130		-----	0.12	0.18	0.25	-----	0.14	0.21	0.29							
	▲ 1260 UNIBLOK	1260°C (2300°F)		(12UB, 14UB 130kg/m ³) 0.09 0.13 0.19 0.27				(12UB, 14UB 130kg/m ³) 0.10 0.15 0.22 0.31					UB-12						
	▲ 1400 UNIBLOK	1400°C (2600°F)	128 ~ 210	(12UB, 14UB, 160kg/m ³) 0.08 0.12 0.17 0.24				(12UB, 14UB, 160kg/m ³) 0.09 0.14 0.20 0.28					-0.5 (900°C), -1.0 (1000°C)	-----	-----				
	▲ 1500 UNIBLOK	1500°C (2800°F)		(16UB, 130kg/m ³) ----- 0.12 0.18 0.23				(16UB, 130kg/m ³) ----- 0.14 0.21 0.27											
	* 1600 UNIBLOK	1600°C (3000°F)	100, 130													300 x 300 x 150~300			
▲ 1260 SABER BLOC	1260°C (2300°F)		(12SB, 14SB, 130kg/m ³)				(12SB, 14SB, 130kg/m ³)					14SB				Furnace linings in such industries as steel, nonferrous, chemical, ceramic			
▲ 1400 SABER BLOC	1400°C (2600°F)	128 ~ 210	0.08 0.13 0.19 0.27				0.09 0.15 0.22 0.31					-0.2 (1000°C), -1.0 (1100°C)	-----	-----					
▲ 1500 SABER BLOC	1500°C (2800°F)		(12SB, 14SB, 150kg/m ³)				(12SB, 14SB, 150kg/m ³)												
* 1600 SABER BLOC	1600°C (3000°F)	130	0.08 0.12 0.18 0.23				0.09 0.14 0.21 0.27												
SHAPES	1000 VFS	1000°C (1800°F)	250	(1260 VFS)												Various shapes depending on application	Molten aluminum tap out cones Pipe cover plate heater Combustion chamber of water heater Heat barrier cover		
	▲ 1260 VFS	1260°C (2300°F)	250	0.06 0.08 0.12 0.16				0.07 0.09 0.14 0.19					-0.8 (900°C), -1.1 (1000°C)	-----	-----				
	▲ 1400 CVFS	1400°C (2600°F)	250																
	* 1600 VFS	1600°C (3000°F)	180																

▲ manufactured by **ISOLITE CERAMIC FIBERS SDN. BHD.**
 * Contains SAFFIL alumina fiber.
 SAFFIL is a registered trademark of Imperial Chemical Industries PLC. of the UK.

• Specifications are subject to change without notice.
 Values are for reference only.
 • Thermal conductivity data are based on "ASTM C201"
 • 1400°C classification temp. is equivalent to 2600°F