

TEKNOFIBRA®



Teknofibra is a very light weight material, heat reflecting, heat absorbing, sound absorbing, adhesive. This unique material protects parts mounted in close proximity to high temperature that would otherwise be damaged without proper protection. Teknofibra is produced in standard size, or realized to customers drawing. Teknofibra has been created and underwent a performance tests at our engineering labs. Our company specialized in the field of acoustics- and energetics engineering, industrial, environmental and building. Our competence and the experience matured on racing, have ensured to Teknofibra thermal and acoustics performance that until today any other insulator is not able to give.



The main applications of Teknofibra in racing are:

- protect the body and any other part near manifolds, exhaust pipes, turbo and other heat sources.
 - used as barrier against heat and flames between engine and cockpit
 - placed between the air box and the throttle body allowing the flow of cold air.
 - applied on the fuel tank to keep fuel temperature lower
 - applied on oil tank and shock absorbers reservoir in close proximity to the exhaust pipes, helps in keeping the gas and oil temperature more stable.
- Teknofibra has excellent acoustic properties also.



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PRACTICAL EXAMPLES



TEKNOFIBRA SHEET:

Positioned 2mm from 800°C heat source:

TEKNOFIBRA (AIT-TK-FIB/2) 2mm: heat transmitted 20°C (Size : 1 meter x 0,73 meter)

TEKNOFIBRA (AIT-TK-FIB/4) 4mm: heat transmitted 5°C (Size : 1 meter x 0,73 meter)

Positioned to direct contact to the heat source of 800°C:

TEKNOFIBRA (AIT- TK-MET/4) : heat transmitted 45°C (Size : 620mm x 265mm)

Thermal conductivity: $\lambda=0.036 \text{ W/mK}$ (at 310°C)

Thermal resistance: $R=0.047 \text{ m}^2\text{K/W}$ (at 310°C – tk 1,7mm)

Data comparison of the highest performing insulate materials in commerce

Sorted by decreasing performance (thermal conductivity increase)

	Thermal conductivity at 20°C	Flame resistance	High temperature resistance	Physiological safety (nontoxic)
Teknofibra®	0,029	OK	OK	OK
Polyurethane foam slabs from block	0,032	X	X	X
XPS foam 32/35 kg/m ³ (with surface skin)	0,032	X	X	OK
Mineral wool	0,035	X	OK	X
PSE panels (polystyrene) w. UNI 7819	0,040	X	X	OK
Semi rigid mineral wood panels	0,040	X	OK	X
Cork Insulation Panels	0,045	X	X	OK
Fiberglass felt	0,046	X	OK	X
Extruded polyethylene foam	0,050	X	X	OK
Asbestos	0,052	OK	OK	X
Ceramic Fiber	0,070	OK	OK	X
Wood wool panels	0,097	X	X	OK
Expanded clay granules	0,104	OK	OK	OK
Pine (heat flow perpendicular to fibers)	0,150	X	X	OK
Pure Gypsum	0,350	OK	OK	OK
Plasterboard	0,540	OK	OK	OK

*) W/mk from SW PAN2 ANIT and CE declaration of producers