



EAS

Industrial sewing thread

PTFE thread
Fiberglass thread
Para aramid wire thread
Meta aramid thread

Through worldwide promoting and years of experience, EAS is able to offer specialized sewing threads for almost any application including furniture upholstery, bedding, aerospace, automotive, textiles, clothing and more.

Brief introduction:

EAS industrial sewing threads were first coming up with customers requirement. Combining with fiber research, producing experience, finish experience, we began with fiberglass sewing thread. After receiving well satisfied feedback, we are trying more fiber. Now, we are looking for more new fibers and finish methods to meet various solutions.

PTFE thread

EAS offers high strength 100% PTFE/Teflon continuous fiber thread, which is incredibly resistant to rays UV, external climatologic agents, chemical agents and temperature changes.

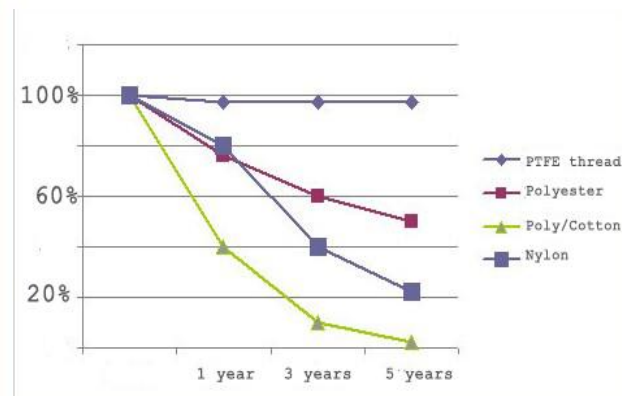


Item	Linear density, D	Breaking strength, N	Elongation, %	Yield, meters per 800g
TF-1250(C)	1250±50	35	6	6000
TF-1400(C)	1400±50	39	7	5140
STF-1200	1200±50	42	7	6000
STF-2800	2800±50	79	7	2570

C: means colored

Features:

- High strength: Sewing Thread represents a very small part of the total cost of a fabric
- Versatile useable: The thread has an operating temperature from -70°C to +260°C. This gives security and flexibility for the geographical use.
- Easy maintenance: The thread is resistant to salt and bird droppings and is therefore the first choice for sails and awnings.
- Flame retarded: LOI (limited oxygen index) higher than 95 %.
- Low abrasion: PTFE has an extremely low coefficient of friction.
- Weathering properties: Total UV- and weather resistance are unique characteristics of PTFE. PTFE will neither rot nor degrade and is resistant to micro-organisms and pests.



Applications:

- ✓ Filter bags
- ✓ Awnings
- ✓ Tents
- ✓ Boat Covers
- ✓ Marine Enclosures
- ✓ Marine Upholstery

Fiberglass thread

Fiberglass thread is kind of coated thread. EAS adopts the providential soft and high strength fiberglass DE or Beta yarn as the basic yarn, through plied or wire insert, PTFE/Teflon coated then being finished thread.

Item	Strength, N	Linear density, tex	Construction	Yield, meters per 1000g
GFT-12	79	160	ECDE	6250
GFT-16	100	210	ECDE	4760
GFT-12R	85	200	ECDE	4750
GFT-16R	135	270	ECDE	3700
HGFT-12	80	140	ECBC	7150
HGFT-18	110	210	ECBC	4760
HGFT-24	140	280	ECBC	3570



Feature:

- Good tensile strength
- Uniform coated with PTFE, good resistance to chemicals
- Smoothly to sewing
- High temperature resistance
- Lower cost than other industrial thread
- Non combustible under normal condition
- Low moisture absorption

Applications:

- ✓ High Temperature Textiles
- ✓ Safety Spray Shields
- ✓ Braided Sleeving
- ✓ Insulation Jackets
- ✓ Thermal Insulation Pads
- ✓ High Temperature Gaskets
- ✓ Kiln Seals
- ✓ Fire Resistant Composites
- ✓ Welding Blankets
- ✓ Heat Shields
- ✓ Filter bag

Para aramid thread

EAS offers para aramid thread spun in the high quality raw aramid spun or filament yarn. Through special treat to the spun thread surface makes it suitable for various applications.

Item	Yarn density, tex	Type	Breaking strength, cN	Ply
KT-45	45	Spun	≥3700	2-4
KT-60	60	Spun	≥4500	2-4
KT-90	90	Spun	≥6500	2-4
KT-800	90	Filament	≥18000	2
KT-1200	135	Filament	≥28000	2-3



Feature:

➤ Excellent Flame resistant

The limiting oxygen index(LOI) is over 28%. start to carbonise and decompose above 370°C. The thread is permanent flame retarded, seld extinguishing

➤ High temperature resistant

it is able to perform well for a long period of time under acid base in 204°C 70% strength of threads remains after being in 300°C for 1000 hours at low shrinkage.

➤ Resistant to chemicals

Good resistance to dilute acids and bases.Degraded by strong mineral acids and strong mineral bases

➤ Very high tensile strength and modulus at low weight

High resistance to breakage and high break elongation ratio, very excellent to cut protection

Applications:

- ✓ Fire resistance Clothing
- ✓ Welding Gloves and Aprons
- ✓ Heat Shield Tarpaulins
- ✓ Bullet Proof Vests
- ✓ Safety Apparel

Aramid Wire Thread

Aramid stainless steel wire sewing thread choose normal 1414 para aramid or kevlar with high temperature raw steel yarn for the support. The materials imparts the thread good sewability and outstanding work exposure high temperature or fire.

Kevlar® is a registered brand of Dupont.



Item	Tex	Construction	Ply	Breaking strength, N	Yield, meters per 500g
KT60R	100	Spun	3+4	45	5000
KT200R	90	Filament	2+4	38	5500
KT1000R	180	Filament	1+4	220	2770
KT1000R	210	Filament	1+6	220	2380
KT1000R	270	Filament	1+9	270	1850
KT1200R	160	Filament	3+2	270	3125

Aramid and wire ply can be customized. Aramid:2~4ply. Wire:1~10ply.

Features:

- High tensile strength and modulus.

The threads inherit both kevlar and wire thread's properties. It has excellent strength and modulus.

- High temperature and fire resistance.

The kevlar is permanently fire resistance material. The wire can keep a good state under fire. Kevlar can work under 300°C, 304 wire under 720°C, 316L under 1100°C.

- Sewability

Kevlar has good sewability and low strength loss after high speed sewing. Little breaking happens.

※Note:

The working temperature mentioned is not always exact but advised temperature. In the specific condition and standard, the thread can work higher.

Applications:

- ✓ Fire blanket or curtain
- ✓ Conductive cloth
- ✓ Industrial rope and cord
- ✓ Heat insulation jacket or cover

Nomex® thread

EAS offers Nomex® thread spun in the high quality raw Nomex® filament yarn. Through special treat to the spun thread surface makes it suitable for various applications. There is NT series of Nomex thread

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Item	Yarn density, tex	Twist	Breaking strength, cN	Tenacity, cN	Yield, m/kg
NT-90/3	90	430SZ	2400	27	11000
NT-60/3	60	580SZ	1550	27	16500
NT-45/3	45	740SZ	1150	26.5	22000
NT-40/3	40	770SZ	1025	26	25000
NT-35/3	35	830SZ	900	25.5	27500

Feature:

- Excellent Flame resistant
The limiting oxygen index(LOI) is over 30%. start to carbonize and decompose above 200°C. The thread is permanent flame retarded, self extinguishing
- High temperature resistant
it is able to perform well for a long period of time under acid base in 204°C 80% strength of threads remains after being in 370°C for 1000 hours at low shrinkage.
- Resistant to chemicals
Good resistance to dilute acids and bases. Degraded by strong mineral acids and strong mineral bases.
- Very high tensile strength and modulus at low weight
High resistance to breakage and high break elongation ratio, very excellent to cut protection. Keep stable property under working temperature.

Kevlar vs Nomex

Fiber	Density g/cm ³	Modulus, Gpa	Tenacity	Fire retarded
Kevlar29	1.45	75	22-27	Fair
Nomex	1.38	17	5.8	Excellent

Material	Ultimate strength, Mpa	Density, g/cm ³
UHMWPE fiber	2300-3500	0.97
Kevlar	2757	1.44
E Glass Fiber	3450	2.57
PP	19.7-80	.91
Spider Silk	1000	1.3
Nylon	75	1.15

Applications:

- ✓ Filter bag
- ✓ Fireman' s Clothing
- ✓ Welding Gloves and Aprons
- ✓ Heat Shield Tarpaulins
- ✓ Bullet Proof Vests
- ✓ Safety Apparel