APLIX
FASTENING THE FUTURE

Hook & Loop fastening systems

APLIX is one of the world's leading suppliers of self-gripping fastening system components. The company has been providing fastening system solutions for over 50 years and operates five ISO/TS16949 certified plants in France, the United States and China. APLIX strives to be the specialist at developing innovative products and solutions which provide optimum value for the global self-gripping fastener market.

Working closely with the aircraft and aerospace industries, APLIX has engineered a complete line of self-gripping fasteners with the following advantages :

- Resistance to fire, smoke density and toxicity
- Lightweight
- Resistance to extreme temperatures
- Easy to use

APLIX operates its own test laboratory.

Aplix leading products

aplix® 400 - FR -

- Self-gripping closure 100% polyamide.
- Fire-retardant.
- Economical with excellent peel performance.
- Available in "sew-on" and self-adhesive versions.

Certifications:
FAR/EASA CS 25.853 Appendix F Part 1 (a) (1) (ii) 12s, ABS 1236, ABD 0031.

aplix® 800 - FR -

- Self-gripping closure 100% polyamide.
- Fire-retardant.
- Long cycle life (up to 10,000 cycles).
- Available in "sew-on" and self-adhesive versions.

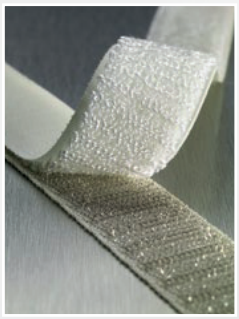
Certifications:
FAR/EASA CS 25.853 Appendix F Part 1 (a) (1) (ii) 12s, ABD 0031.

aplix® 810 - FR -

- Self-gripping closure 100% polyester.
- Fire-retardant.
- Resistant to humidity.
- Available in "sew-on" and self-adhesive versions.

Certifications:
FAR/EASA CS 25.853 Appendix F Part 1 (a) (1) (ii) 12s, BMS 8-285 J.

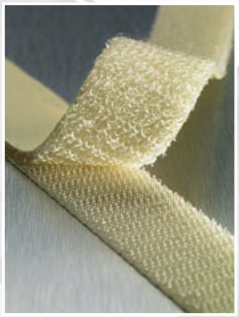
aplix® 820 – 821



- Self-gripping closure, consisting of an aramid loop and a stainless steel hook.
- Self-extinguishing.
- Resistant to very high temperatures (235°C).

Certifications:
FAR/EASA CS 25.853 Appendix F Part 1 (a) (1) (ii) 12s, ABS 1300.

aplix® 840



- Self-gripping closure 100% PPS.
- Self-extinguishing.
- Resistant to high temperatures (190°C).
- Available in "sew-on" and self-adhesive versions.

Certifications:
FAR/EASA CS 25.853 Appendix F Part 1 (a) (1) (ii) 12s, FAR/EASA CS 25.856 (a), ABS 1133, BMS 8-372.

Fire retardant treatment.
High cycle life (up to 10 000).
Mechanical performance stability.

- Closure consisting of 2 woven tapes :
  - mono-filament hooks
  - multi-filament textured loops.
- Material : 100% fire retardant polyamide.
- Methods of attachment : bonding, sewing or stapling.
- Widths : 16, 20, 25, 30, 38, 50 and 107 mm.
- Colours :

000 958 086 085 008 064

PERFORMANCE DATA

STRENGTHS

	New state	10 000 cycles
Peel Strength (N/cm) as defined by EN 12 242	1	0.8
Shear Strength (N/cm²) as defined by EN 13 780	10	7
Traction Strength (N/cm²) as defined by NF G91-103	8	6

NB : The results shown above are averag e values obtained from 25mm-wide tapes.

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Clarendon Specialty Fasteners
www.clarendonsf.com

TECHNICAL CHARACTERISTICS

Physical characteristics	• Thickness of the closure : 3.2 mm (hook : 1.9 mm / loop : 2.8 mm). • Weight of the closure : 0.066 g/cm^2. • Width tolerance : 16, 20, 25, 30, 38, 50 $^{+/-1}$ mm and 107 $^{+/-2}$ mm. • Width of the selvedge : 2 mm. • Breaking point of the tape : >200 N/cm. • Elongation at breaking point : 50% max.
Effects of temperature	• Resistance to temperature : 140 °C • Melting point : 240°C • Not recommended for long-term exposure to the sun, use aplix® 810 (polyester)
Reaction to chemical products	• Resistant to strong alkalis, trichloroethylene, acetone, hydrocarbons and alcohols. • Sensitive to acids.
Colour fastness	• EN ISO 105-C06: resistance to do mestic and industrial washing. • EN ISO 105-X05 : dry cleaning.
Cleaning	• Washing at 60 °C. • Dry cleaning. • Drying and ironing in closed condition.

NB : These characteristics are only valid for standard products (non adhesive products).

PACKAGING

Widths	16 mm	20 mm	25 mm	30 mm	38 mm	50 mm	107 mm
25 ml	200 ml	300 ml	250 ml	200 ml	150 ml	200 ml	100 ml
100 ml	1800 ml	1500 ml	1200 ml	1000 ml	800 ml	600 ml	300 ml

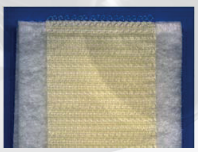
COATINGS AND SPECIAL TREATMENTS

Self-adhesive -D-

Characteristics	• Resistant to fire
Type of adhesive	• Synthetic elastomer
Type of protective film	• Siliconised PET
Resistance to temperature	• - 30 / + 60 °C

Suitable for gluing version

- Fire-resistant Hook or Loop on non-woven fabric.
- Product designed for attaching the foam in aircraft seats. The non-woven fabric increases the bonding area.



APPROVALS AND STANDARDS

AIRCRAFT	FAR/EASA CS 25-853 Appendix F Part 1 (a) (1) (ii) 12s. and ABD 0031
MILITARY	NF G07-184 Class B
RAILWAY	NF 16.101 Class F3 / M2 (NF P 92-501 & NF P 92-505)
AUTOMOTIVE	FMVSS-302

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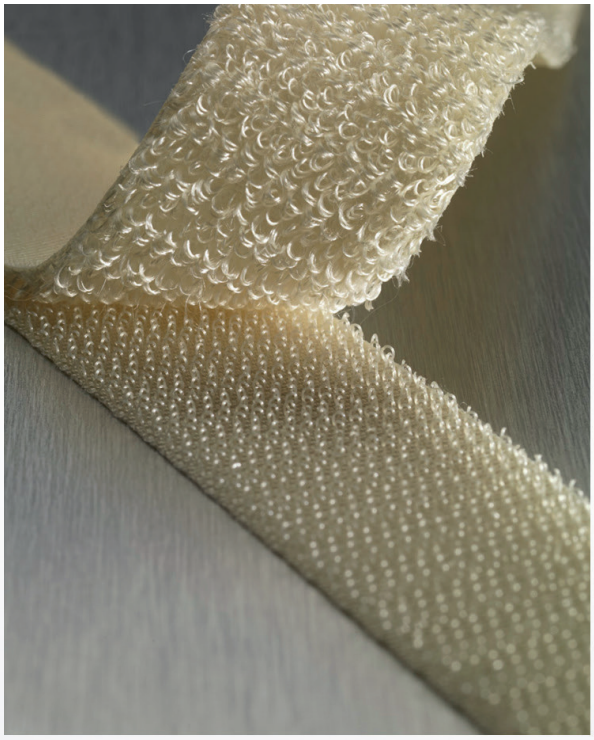

High temperature and fire resistance.

- Closure consisting of 2 woven tapes :
  - mono-filament hooks
  - multi-filament loops.
- Material : 100% polyphenylene sulfide (PPS).
- Methods of attachment : sewing, bonding, riveting or stapling.
- Widths : 12.5, 20, 25 and 50 mm.
- Colours : 694

PERFORMANCE DATA

STRENGTHS

	New state	100 cycles
Peel Strength (N/cm) as defined by EN 12 242		
Shear Strength (N/cm²) as defined by EN 13 780		
Traction Strength (N/cm²) as defined by NF G91-103		

NB : The results shown above are average values obtained from 25mm-wide tapes.

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TECHNICAL CHARACTERISTICS

Physical characteristics	• Thickness of the closure: 3.2 mm (hook: 2 mm / loop: 2.3 mm). • Weight of the closure: 0.083 g/cm^2.
Effects of temperature	• Resistance to temperature : 190 C. • Melting point : 285 C.
Reaction to liquids	• Maximum shrinkage in boiling water : < 1%. • Maximum absorption of humidity: < 1%.
Reaction to chemical products	• Resistant to alkalis, acids, organic solvents. • Sensitive to oxidizers such as concentrated nitric acid.

NB : These characteristics are only valid for standard products (non adhesive products).

PACKAGING

Widths	12.5 mm	20 mm	25 mm	50 mm
45.7 lm (50 yards)	457 lm	457 lm	457 lm	229 lm

COATINGS AND SPECIAL TREATMENTS

	Approved Airbus PSA	Approved Boeing PSA
Characteristics	• High immediate tack • Fire retardant	• High immediate tack • Fire retardant
Type of adhesive	• Acrylic	• Acrylic
Type of protective film	• Siliconised PE	• Siliconised PE
Resistance to temperature	• - 30 C / + 90 C	• - 30 C / + 90 C

APPROVALS AND STANDARDS

AIRCRAFT	FAR/EASA CS 25-853 Appendix F Part 1 (a)(1)(i) 60s. and (a)(1)(ii) 12s. FAR/EASA CS 25-856 (a) BMS 8-372 ABS 1133

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