

PRODUCT DESCRIPTION



The **VELCRO® Brand Hook 058 FR** is a strong and durable textile hook that has a flame-retardant treatment, making it suitable for fire resistance industrial applications. It is a woven medium profile polyamide hook tape, that can be opened thousands of times without losing its strength when paired with the **VELCRO® Brand Loop 010 FR**.

The **VELCRO® Brand Hook 058 FR** is designed for a wide range of flame-retardant applications in various demanding industries such as medical, transportation, military, packaging, footwear & apparel and many others.






Available in multiple colours, widths, converted items and compatible with many application methods such as sewing, welding and **VELCRO® Brand adhesives**.

PRODUCT CONSTRUCTION

Fastening system	VELCRO® Brand Hook 058 FR
Construction	Woven fabric
Composition	Polyamide, synthetic coating
Thickness	1.70 - 2.05mm
Weight	300 g/m ² ± 10 %
Widths available + Variations ¹	16, 20, 25, 30, 38 ± 1mm 50 ± 1.5mm 100, 107, 150, 160 ± 2mm
Colour available	Check VELCRO® Brand colour chart

¹ Other widths capabilities upon request

PERFORMANCE CHARACTERISTICS²

Fastening system	VELCRO® Brand Hook 058 FR
 Peel EN-12242	Minimum: 1.3 N/cm Average: 2.0 N/cm Tested with VELCRO® Brand Loop 010 FR
 Shear EN-13780	Minimum: 7.3 N/cm ² Average: 10.3 N/cm ² Tested with VELCRO® Brand Loop 010 FR
 Tension NF-G91-103	Minimum: 2.5 N/cm ² Average: 5.5 N/cm ² Tested with VELCRO® Brand Loop 010 FR
 Cycle Life EN-1414	50% of the minimum performance, 5,000 cycles Tested with VELCRO® Brand Loop 010 FR
 Tensile Strength EN-ISO 13934-1	Minimum: 210 N/cm Average: 300 N/cm

² The average values are only for reference. Suitable performance for a specific intended application should be evaluated by the user.

PRODUCT COMBINATIONS

The **VELCRO® Brand Hook 058 FR** has been designed to be used with the **VELCRO® Brand Loop 010 FR** and the **VELCRO® Brand adhesives range**.

SPECIAL CHARACTERISTICS
Fastening system
VELCRO® Brand Hook 058 FR


Shrinkage
EN-ISO-6330 / EN 12243

Maximum 4% after 3 washes at 60°C



Colour Tolerance
dE (CMC)

$\Delta E \leq 2.0$



Fire resistance
FAR 25.853
Vertical Test: 12 s.

Burn length $\leq 203\text{mm}$
Flame time $\leq 15\text{sec}$
Drip flame time $\leq 5\text{sec}$



Fire resistance
FMVSS 302
Burn rate (mm/min)

Self-Extinguishing (SE)



Smoke Density & Toxicity
Test - ABD0031

Smoke Density: Acceptance Criteria Maximum Optical Density after 4 min ≤ 200 for flaming and non-flaming mode
Toxicity: Acceptance Criteria below limit requested by substance



Fire resistance
EN-ISO 11612:2015

Test according to ISO 15025, Procedure A & after 5 washes at 30°C sewn over a standard aramid fabric.
Post- After flame (s) ≤ 2 s
After-glow time (s) ≤ 2 s



Fire resistance
EN-ISO 14116:2015

Test according to ISO 15025, Procedure A & after 5 washes at 30°C sewn over a standard aramid fabric.
Classification limited flame spread Index: 3



Temperature Resistance
ISO 17493

Product functional after 5 min at 180°C



OEKO-TEX®
STANDARD 100 Class I


ADDITIONAL PERFORMANCE CHARACTERISTICS

Outdoor use

Since the product is made with polyamide, which has a known tendency to degrade in UV light, the **VELCRO® Brand Hook 058 FR** is not recommended for direct, prolonged exposure to UV light.



Resistance to solvents

The polyamide in this fastening system is resistant to cleaning with some solvents and to accidental exposure to common solvents, but any such exposure must not be prolonged (except for strong acids, which hydrolyse it).

Its resistance to fluids used in transport, such as gasoline, motor oil or transmission fluids, has not been tested. We recommend testing the product for its specific application.



Fire resistance

The **VELCRO® Brand Hook 058 FR** does have flame-retardant properties. Please, see information related flammability properties in 'Special Characteristics'.



Water/Moisture resistance

The polyamide in this fastening system degrades its mechanical properties when exposed to water/high humidity (>80% RH) for long periods of time. These properties are typically recovered when the product dries.



Sterilisation

These products have not been tested for physical sterilisation (autoclave, steam, gamma rays, etc.) or chemical sterilisation (ethylene oxide, hydrogen peroxide, etc.).



Colour fastness

The **VELCRO® Brand Hook 058 FR** guarantees the following colour fastness:

Colour fastness to rubbing (ISO 105 X-12): Min. 4

Colour fastness to water (ISO 105 E-01): Min. 4

Colour fastness to sea water (ISO 105 E-02): Min. 4

Colour fastness to perspiration (ISO 105 E-04): Min. 4

Colour fastness to artificial light (ISO 105-B-02): Min. 5 (dark colours); min. 4 (white and light colours); min 3 (fluor colours)



Biocompatibility

The **VELCRO® Brand Hook 058 FR** has not been tested for biocompatibility.



Electrostatic discharge

The **VELCRO® Brand Hook 058 FR** has not been tested for electrostatic discharge after opening and closing the fastener. These products must first be tested in applications where electrostatic discharge is a concern.



Seam strength

The **VELCRO® Brand Hook 058 FR** can be applied to several substrates by sewing. A square stitch should be used when possible, but all common stitches also offer adequate strength. The choice of thread will depend on the application and substrate.

SUGGESTED APPLICATIONS

The **VELCRO® Brand Hook 058 FR** can be used in a wide variety of fire resistance applications such as:



TRANSPORTATION:

Automotive interior & accessories, carpet fixation, seat trim covers, aircraft seating.

MEDICAL:

Orthopaedics braces, gowns.

**PACKAGING:**

Returnable packaging applications.

**FOOTWEAR & APPAREL:**

Military uniforms, fashion & sport garments, workwear, shoes & ski boots.

**INDUSTRIAL & CONSTRUCTION:**

Panel fixation, signage cable management, furnishing & curtains, tents, sports equipment.



We recommend testing the product before use since the conditions specific to each application may cause differences in performance.



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COUNTRY OF ORIGIN

SPAIN

REGULATORY ELEMENTS

For product declarations of conformity on regulatory elements and additional information, contact productcompliance_emea@velcro.com.

PRODUCT USE

The information, statements and comments contained within this document are based on our experience and testing and are believed to be accurate. However, because there are many factors involved in specific applications that can impact end use and performance, product users should always test the product for its ability to meet the requirements of their specific use and method of application.

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