



**CERTIFICATE OF CONFORMITY**

With this letter, VELCRO EUROPE S.A. certifies that the product

HOOK & LOOP PSI 25 mm

Fulfil the requirements indicated below, established at the French Army norm  
[ BROCHURE 5508 GPEM / TC ]

| <b>Construction Characteristics</b>    |                            | <b>Specificacion closure 25 mm</b> |    |
|--|----------------------------|------------------------------------|----|
| Raw material                           | Loop yarn                  | Polyamide 6.6 texturized           |    |
|  | Hook monofilament          | Polyamide 6.6                      |    |
| Total width (mm)                       | Hook                       | 25 ± 1                             |    |
|  | Loop                       | 25 ± 1                             |    |
| Edge's width (mm)                      | Hook                       | 2.5 ± 0.3                          |    |
|  | Loop                       | 2.5 ± 0.3                          |    |
| Useful width (mm)                      | Hook                       | Minimum                            | 20 |
|  | Loop                       | Minimum                            | 20 |
| Number of hook / cm <sup>2</sup>       | Total percentage defective | Maximum 7 %                        |    |
| <b>Mechanical properties</b>           |                            | <b>Specificacion closure 25 mm</b> |    |
| Shear initial (daN/cm <sup>2</sup> )   | Minimum                    | 1.0                                |    |
| Peel initial (daN/cm)                  | Minimum                    | 0.135                              |    |
|  | Maximum                    | 0.240                              |    |
| Tension initial (daN/cm <sup>2</sup> ) | Minimum                    | 0.53                               |    |



| <b>Mechanical properties</b>  |         |                 | <b>Specificacion closure 25 mm</b> |
|---|---------|-----------------|------------------------------------|
| Shear after 3 washes at 95°C and 5000 cyckes (daN/cm <sup>2</sup> )   | Minimum |                 | 0.65                               |
|   |         |                 |                                    |
| Peel after 3 washes at 95°C and 5000 cyckes (daN/cm)                  | Minimum |                 | 0.090                              |
|   | Maximum |                 | 0.220                              |
| Tension after 3 washes at 95°C and 5000 cyckes (daN/cm <sup>2</sup> ) | Minimum |                 | 0.350                              |
|   |         |                 |                                    |
| Maximum elongation with a Load of 20 daN (%)                          | Hook    | Maximum         | 12                                 |
|   | Loop    | Maximum         | 12                                 |
| <b>Colorfastness properties</b>                                       |         |                 | <b>Specificacion closure 25 mm</b> |
| Colorfastness against organic solvents                                | Hook    | Color change    | 4 / 5                              |
|   |         | Stain polyamide | 4 / 5                              |
|   |         | Stain wool      | 4 / 5                              |
|   | Loop    | Color change    | 4 / 5                              |
|   |         | Stain polyamide | 4 / 5                              |
|   |         | Stain wool      | 4 / 5                              |
| Colorfastness to washing at 95°C                                      | Hook    | Color change    | 4                                  |
|   |         | Stain cotton    | 4                                  |
|   | Loop    | Color change    | 4                                  |
|   |         | Stain cotton    | 4                                  |
| <b>Dimensional satability properties</b>                              |         |                 | <b>Specificacion closure 25 mm</b> |
| To washing at 95 (%)  | Hook    | Maximum         | 1.5                                |
|   | Loop    | Maximum         | 1.5                                |



| <b>Utilization properties</b>                         |         |         | <b>Specificacion closure 25 mm</b>          |
|---|---------|---------|---|
| Performance to washin Hook & Loop                     |         |         | No deformities – No fraying                 |
| Performance to cycle life test (5000 cycles) (daN/cm) | Shear   |         | Maximum loss of 20 % against initial values |
|   | Peel    |         | Maximum loss of 20 % against initial values |
|   | Tension |         | Maximum loss of 20 % against initial values |
| <b>Special characteristics</b>                        |         |         | <b>Specificacion closure 25 mm</b>          |
| Camber (mm)   | Hook    | Maximum | 30  |
|   | Loop    | Maximum | 30  |
| Deflection (mm)                                       | Hook    | Maximum | 15  |
|   | Loop    | Maximum | 15  |
| Minimum resistance of the Edges against fraying (daN) | Hook    | Maximum | 1.5   |
|   | Loop    | Maximum | 1.5   |

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ANEXO: IDT – 605-B

FTP 451 Versión 2