

Annex 3 - Technical information for Tarpaulin 4x6m testing for RFT/ICRC/IOM/GVA22/00158

Testing details:

Technical tests to be tested on the item	Item requirements (fail or pass status written in the report)
Material for the plain sheet	Woven high-density polyethylene (HDPE) black fibbers fabric laminated on both sides with white low density polyethylene (LDPE) coating.
Material for the reinforcement bands	Woven black HDPE fibers fabric and coated with grey LDPE on the outside.
Tear strength in plain sheet at state of origin	Minimum 100N under ISO 4674-1B 2003, with a test piece of 200x200mm as described in ISO 4674 annex B , in plain sheet.
Tensile strength in plain sheet at state of origin	Minimum 500N and 15% to 35% elongation in warp and weft in plain sheet under ISO 1421-1.
UV resistance of the plain sheet, measured as remaining tensile strength after UV exposure	The tarpaulin tensile strength under ISO 1421-1 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak) must be: Minimum 80% of the original value of the actual product, AND not less than 475N. To be tested in the plain sheet.
Tensile strength in the reinforcement bands at state of origin	Minimum 700N inside the reinforcement bands as per ISO 1421-1, pulling lengthwise in a pre-punched hole of 8mm with a hook of 8mm wire diameter. To test in 2 holes in each side bands.
UV resistance of the reinforcement bands measured as remaining tensile strength after UV exposure	The reinforcement bands tensile strength under ISO 1421-1 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak) must be: Minimum 80% of the original value of the actual product, AND not less than 665N. To be tested inside the reinforcement bands as described above.
Welding number and strength at state of origin	Only one welding allowed, in the middle of the sheet, length wise. The tarpaulin tensile strength crossways at the place of the welding under ISO 1421-1 must be: Minimum 50% of the original value of the actual product, AND not less than 400N.
Coating colour	White sun reflective on both sides of the sheet without fluctuation in colour. Grey coating on the outside of the bands. White Coating colour definition: L.a.b Coordinates under ISO 105J01 Minimum L : 82; "a" value between -1.7 and +1.5; "b" value between -4.5 and 0.
Flame retardant EN13823+A1	Minimum class D, s2, d2. Minimum time to reach large wing external edge: 4minutes (LFS)
Opacity measured as minimum reflection and maximum transmission, in the range of visible light and near infrareds	Measured under ISO 13468-1. Values should be measured respectively from 350 to 750nm, and from 750 to 2500nm wavelength. The final result is the average of the averages in each range. Minimum total reflection: 35% Maximum total reflexion: 50%. Maximum total transmission : 5%
Reinforcement bands welding	The bands must be well sealed to the tarpaulin: Minimum 30 N, maximum 120 N resistance to pull the bands off according to ISO2411:2000 with following adjustments: - Only 5 test specimens in the longitudinal direction are tested per tarpaulin (each test is performed on a different band). - Width of the test specimens: width of the bands. - Test result is the arithmetic mean of the five tests.
Central welding	The two pieces making the tarpaulins must be well sealed together. Nevertheless, it must be possible to pull the seal off without tearing neither part of the tarpaulin: Minimum 30 N, maximum 120 N resistance to pull the seal off according to ISO2411:2000 with following adjustments: - Only 5 test specimens in the longitudinal direction are tested per tarpaulin. - Width of the test specimens: width of the welding. - Test result is the arithmetic mean of the five tests.

Full testing charge: **EUR 6'368.90 (with welding) or EUR 6'246.50 (without welding)**

Centexbel offer reference No.: **OFF.22.2318.02**

Lead time to perform complete tests: **Approx. 3 months**

The requested number of the samples:**Three samples of Tarpaulin 4x6m**

Address and contact person for samples:

CENTEXBEL

Technologiepark 70

BE-9052 ZWIJNAARDE

Belgium

Phone +32 9 243 82 15

fax +32 9 2204955

Contact person: Mrs. Patrice VAN BUTSELE

Email: pvb@centexbel.be

Please ensure to contact Mrs. Patrice VAN BUTSELE to complete all necessary procedures before delivering the samples.