

Item Application Sample



General Information and Description

Reinforced plastic tarpaulin in sheets of 4 x 5 meters was developed by an international research project and designed for long outdoor use in all climates.

Plastic Tarpaulins are to be used in support to humanitarian operations, for temporary shelter and are recommended for individual (family) shelter protection.

Technical Specifications

Tarpaulin Size: the finished size of each sheet is 4 x 5 meters $\pm 1\%$.

Effective area: 20.00 m² +/- 1%.

Material: made of woven high-density black polyethylene (HDPE) fibers, warp x weft, laminated on both sides with low density polyethylene (LDPE) coating, with reinforced rims by heat sealing on all sides, (or 2 sides heat sealing and 2 sides double stitching), and a 3 to 5 millimeters diameter PE or PP (flexible materials) rope on the edge, inside the hem. 1000 denier minimum.

Material net weight: minimum 190 g/m² ± 20 g/m².

Tensile strength: minimum 600 N both directions of warp and weft (BS 2576,

50 mm grab test, or equivalent).

Tensile strength of the eyelets: minimum 700N inside the eyelets as per ISO 1421-1, pulling lengthwise with a hook of 8mm wire diameter. To test in 2 eyelets in each side.

Tear strength: minimum 100 N both directions (BS 4303 wing tear or equivalent) or under ISO 4674 (A2).

UV resistance: stabilized against ultraviolet rays and excess heat for long outdoor exposure. Around 5% loss on original tensile strength under ISO 1421 after 1500 hours UV under ASTM G53/94 (UVB 313 nm peak). The final tensile should not be below 570N.

Welding: only one (01) is allowed along the middle of the sheet, length wise. Minimum resistance is 80% of the original tarpaulin tensile strength in the weft (and not less than 480N) under ISO 1421 plus additional procedure.

Reinforcement eyelets: provided with aluminum eyelets or equivalent on four sheet sides of the single sheets at 100 cm ± 5 cm centre to centre, providing very strong fixation points.

Technical Specifications

Color: white sun reflective on both sides. Inner black fibers to ensure opacity.

Flame retardant under EN 13823 + A1 and CPAI84:

Pass EN 13823 + A1 with the minimum class D, s2, d2.

Pass CPAI84 sections 5 and 6 with maximum 10 s after flame average and maximum 30 s after flame per test piece.

Ageing under ISO 4892-2, type A, 360 hours.

Weight and Volume

Considering the weight of the welding and reinforcement eyelets.

Gross weight per piece: 3.55 kg to 4.65 kg

Gross weight per bale: 20 kg approx.

Gross volume per bale: approx. 0.0437 m³.

Bale Dimension: 56 x 39 x 20 cm

Packing

Plastic tarpaulin sheets are packed in bales. It is ideal to pack 5 pieces of product per bale, and to secure it with polyester straps. However different packing methods may be accepted in order to maximize loadability in pallets and containers.

Optimal Shipping / Container Information

3.300 pieces / sheets per 20'GP (without pallets).
6.500 pieces / sheets per 40'DC (without pallets).
6.500 pieces / sheets per 40' HC (without pallets).
2.800 pieces / sheets per 20' DC (with pallets).
6.000 pieces / sheets per 40' DC (with pallets).
6.000 pieces / sheets per 40' HC (with pallets).

CRI Pallet Details

Fumigated as per IPSM 15 standard. Dimensions (L x W x H): 115 cm (+1 cm / -3 cm tolerance) x 77 cm (+/- 1cm tolerance) x 14.4 cm. Maximum height of the packed pallet: 115 cm. Pallets should be shrink-wrapped and strapped. The palletized goods must not exceed the length and width of the pallet. For further information please refer to the Optimal Shipping / Container Information section.

Manufacturer Marking

Every tarpaulin sheet 4 x 5 m should include a tag stitched in hem, with the manufacturer identification (letters not higher than 2.5 cm). The tag should include the manufacturer's name, unique reference batch number and the date of manufacturing. No company logo should be included with the manufacturer's marking.

Expected Life Span

It is expected that Reinforced Plastic Tarpaulin will maintain sheltering and waterproof capacities for one year under the strongest weather conditions.
It has a shelf life span of 6 years.

Reference Information

For additional information about the use of this product see:

<http://www.plastic-sheeting.org>

<http://www.sheltercentre.org/library>

Graphic Reference

PRINTING OF UNHCR LOGO: A line with UNHCR logos must be printed on both sides of the plastic bale or roll, placed one meter from the bottom edge of the long side on the tarpaulin. For UNHCR visibility logo printing purposes details, see the Reinforced Plastic Tarpaulin Graphic and the UNHCR Logo Application reference available, where size of logo is 51,5 cm wide and 55 cm height. The distance (space) between each logo should be no longer than 60 cm or shorter than 40 cm. One logo cut out of 6 is acceptable.

Typeface (Font), Colour specifications for printing:

Font: Helvetica Bold. Colour specification: Pantone Blue 300 or quadrichrome (CMYK). C = 100%, M = 45%, Y = 0%, K = 0%.

UNHCR Logo Application Reference

