

## Rope, polypropylene, black, 8mm twisted

### Overview

#### Specifications

Item code	4100000072
Unit weight	N/A

Ropes can be made from various types of material, properties of some of the most common materials are summarised below. This page provides specifications only for the polypropylene ropes, although these may not be the best choice in every situation as described below.

	Natural fibre	Polypropylene	Nylon/polyester
<b>Strength</b>	-	+	++
<b>UV Resistance</b>	+++	-	+
<b>Elasticity</b>	+	++	++++
<b>Wear Resistance</b>	+	+	++
<b>Resistance to rot</b>	-	++++	++++
<b>Cost</b>	Cheap	Average	Expensive

Below is the specification of rope used with plastic sheeting, as part of IOM prepositioned kits.

Choose the material according to the use:

- Polypropylene is commonly available and of average cost, it serves general purposes. Very sensitive to UV. Dark colour ropes, in particular black, resist UV far more than light colour ropes.

Standard minimum breaking strength, and in brackets the limit of use:

- Polypropylene: 6mm/590kg (200kg) - 8mm/1040 kg (350kg) - 14mm/2990kg (1000kg)

Black ropes are recommended for outdoors long-term use, for their resistance to UV. Large quantities are normally purchased per weight instead of length. Nevertheless, a minimum length should also be indicated in the contract.

### Description

#### Rope - Polypropylene - Twisted 8mm diameter


<b>Diameter</b>	8mm +/- 0.5mm
<b>Length</b>	15m +/-0.150mm
<b>Weight</b>	n/a
<b>Number of strands</b>	3 minimum

**Rope - Polypropylene - Twisted 8mm diameter**

<b>Type</b>	Twisted
<b>Material</b>	Polypropylene, no recycled fibres, UV stabilized
<b>Colour</b>	Black
<b>Tensile strength</b>	350 kg (1,040kg breaking strength)
<b>Marking</b>	With a permanent label, showing: Type of rope, material, manufacturer, length, tensile strength, standard of reference, inspection certificate reference.
<b>Standard</b>	Specifications should conform to ISO9554
<b>Packing Detail</b>	Items to be packed in bales of 30 units of 15m each. Bales to be strapped with two straps on each side. Each unit of 15m rope to be coiled and secured using ties using a paper tape sufficient enough to handle multiple handlings, and are not individually wrapped to avoid the use of unnecessary single-use plastics.

**Key Considerations**

Acceptable Quality Limits (AQL)

 International Organization for Migration (IOM) The UN Migration Agency	<b>AQL</b> <b>Definitions, penalties, Corrective Action Plan and Quality Control</b> <b>rules.</b>	IOMQC-AQLS00V8 Ver8.0 04.02.2022
<b>Nonconformities classification: Critical: C; Major: M; Minor: m</b>		
<b>Definitions:</b>		
<b>Critical nonconformity</b> : Any discrepancy which might harm an user or makes it impossible to use the product properly is considered to be critical. Lots with Critical discrepancy are subject to refusal.		
<b>Major nonconformity</b> : Any discrepancy which makes the use of the product less efficient than expected is considered to be major. Lots with Major discrepancies can be accepted.		
<b>Minor nonconformity</b> : Any discrepancy which does not have an influence on the performance of the product is considered to be minor. Lots with Minor discrepancies can be accepted.		
<b>Non-Conformities classification and related penalties:</b>		
<b><u>Corrective action plan must be implemented by the vendor on its processes, addressing root causes of occurrence (production) and of non-detection of the nonconformity (QC).</u></b>		
<b>Critical: (AQL 0)</b>		
Nonconforming characteristic (number of nonconforming items $\geq$ Rejection number. ISO-2859-1) implies a penalty of 10% of the value of the total PO per each critical non-conformity to be charged to the supplier. Determination of lot acceptability is to be decided by IOM.		
<b>Major: (AQL 4.0)</b>		
Nonconforming characteristic (number of nonconforming items $\geq$ Rejection number. ISO-2859-1) implies 0.5% penalty of the value of the total PO per each major non-conformity to be charged to the supplier. Determination of lot acceptability is to be decided by IOM.		
<b>Minor: (AQL 6.5)</b>		
Nonconforming characteristic (number of nonconforming items $\geq$ Rejection number. ISO-2859-1) implies implies 0.25% penalty of the value of the total PO per each minor non-conformity to be charged to the supplier. Determination of lot acceptability is to be decided by IOM.		
<b>Quality Control and Acceptance Quality Level</b>		
<b>- The AQLs herein are after IFRC/ICRC with additional parameters on IOM markings and required packaging.</b>		
- The Method of testing is drawn from ISO-2859-1 International Standards (table1: Sample size code letters, and table 2-A: Single sampling plans for normal inspection). The samples will be taken randomly by the buyer from the delivered items and then inspected.		
- The buyer can decide either to inspect the lot at IOM QC laboratory or to use an inspection company for analysis, or <u>both</u> . Transport to laboratory and analysis cost for lab testing are at expense of IOM.		
- The vendor can contest the results of the Quality Control done at IOM warehouses by requesting a lab testing. In this case transport to laboratory and analysis cost for lab testing are at expense of the seller.		
- <b>Nonconformity</b> : non-fulfilment of a specified characteristic requirement.		
- <b>Nonconforming item</b> : item with one or more nonconformities.		
- <b>Lot</b> : definite amount of some product, material or service, collected together.		
- <b>Sample</b> : set of one or more items taken from a lot and intended to provide information on the lot.		

## References and Tools

- [Rope, polypropylene, black, 8mm twisted - AQL](#)

## Other Entries in this Topic

- [Emergency Relief Items Catalogue](#)

## Contacts

For further information, contact [sheltersupport@iom.int](mailto:sheltersupport@iom.int).

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