DC(I) No. 2021-ME dt 30-11-74

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CORD RAYON Breaking Load   686 N 4020-and 48
(CDS Cat Nos)   343 N - 4020-and 48
                                    147 N - 4020-and 48

D.I. (Army) No. A/85756/TC-71   Approved on 27-10-1967

1   SCOPE

1.1   This specification is meant to govern the supply and
inspection of Cord, Rayon, suitable for re-inforcing PVC tube
filled with explosives, and also for assembly of parachutes.

2.   DESCRIPTION

2.1   The Cord, Rayon, shall be made from viscose rayon
yarn Grade 1.

2.2   It shall be clean and free from impurities of any
description.

2.3   It shall be uniformly plied to the correct fold
with well-spun, evenly twisted yarn, of equal thickness
throughout its length, and free from knots, short lengths,
and other defects of a similar nature.

2.4   Cord, Rayon, shall be of 686 N, 343 N, or 147 N
breaking load as per the requirement of the purchaser.

3   TESTS

3.1   Cord, Rayon, shall conform to para 2 above and shall,
in addition comply with the following test schedule.

See back side ——→   Test schedule-1

Test	LIMITS / REQUIREMENTS			Method of Testing
	For Cord Rayon breaking load 686 N.	For Cord Rayon breaking load 343 N	For Cord Rayon breaking load 147 N 2	
construction	(sec. slip attached)	4 plies ¥2 strands each	4 plies ¥1 strand each	—
Mass per meter	1) min 3.8 g. max 4.5 g. 2) min 3.5 g.	1.8 g. 2.2 g.	0.5 g. 1.0 g.	—

(for cord made with

TEST SCHEDULE

Test	LIMITS/REQUIREMENTS			Method of testing
	For Cord Rayon breaking load 686 N	For Cord Rayon breaking load 343 N	For CORD Rayon breaking load 147 N	
Construction	5 plies of 4 strands each of Rayon Yarn of 1650 Denier or 12 plies of 4 strands each of Rayon, Yarn, of 700 Denier only	4 plies of 2 strands each	4 plies of 1 strand each	–
Mass per metre				–
1) Min	3.8 g	1.8 g	0.5 g	
Max	4.5 g	2.2 g	1.0 g	
2) Min	3.5 g			
Max	4.5 g			
Average Breaking load Min	686 N	343 N	147 N	Appendix A
Average Stretch				
1) at 686 N load Max	15%	–	–	–do–
2) at 343 N load Max	–	20%	–	–do–
3) at 147 N load. Max	–	–	20%	–do–

4 **PACKING AND MARKING OF PACKAGES**

4.1 Cord, Rayon, shall be in cheeses of one kilogram each or as agreed to between the purchaser and supplier. Each cheese shall constitute a continuous length of the cord without any loose ends or splices. Each cheese shall be wrapped in polythene or other approved wrapper.

4.2 The wrapper of each cheese shall bear the following marking,

Designation of the store, Batch No./ Lot No.
Manufacturer's name or recognised trade mark,
Supply Order/Contract No., Mass

.... 3

5   INSPECTION

    5.1   Each batch/lot is subject to inspection by, and the final approval; of the Inspecting Officer named in the supply Order/contract.

    5.2   If samples drawn from a batch/lot offered for inspection fail to conform to para 3 and 4.1 of this specification, the whole batch/lot is liable for rejection.

    5.3   The foregoing provisions apply to each contractor or sub-contractor(s).

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Sd/- X X X
(R UNAQ RAM)
DSS
C. I.M.E./For D. I.(Arms).

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APPENDIX 'A'

Method of the determination of the breaking load and stretch

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A.1   The testing machine will be of the pendulum lever type situated in a room whose atmosphere can be conditioned.

A.2   Keep the test specimens, not less than 5 specimens, each 60 cm long, in the conditioning room inside which an atmosphere at 27°C ± 2 deg C and 65% ± 2% R.H. is maintained. The period of conditioning shall be not less than 24 continuous hours.

A.3   Keep the initial unstretched length at between 46 cm and 60 cm between the grips of the machine. Apply the load gradually at a traverse rate of 30 cm/min until the load of 343 N (or 686 M, as appropriate) has been applied.

A.4   Measure the stretched length and calculate the stretch as under:-

$$\% \text{ stretch} = \frac{\text{increase in length}}{\text{initial unstretched length}} \times 100$$

A.5   Record the average of 5 tests.

A.6   In case the breaking load is less than 343 N (686 N as the case may be), record the average breaking load and calculate the average stretch as in para A.4 and A.5 Report the average stretch % at the particular average breaking load obtained.

A.7   If the breaking loads are more than 343 N(or 686 N as the case may be), calculate the average stretch as in para A.3, A.4 and A.5 Record also the average breaking load.

MDG/- 29-8-80.