



Sierra 78

Sierra 78 is a 12-strand single braid of bio-based Dyneema®, an ISCC Certified Eco Sustainable fiber. Made with bio-based feedstock, this fiber maintains the unique properties of Dyneema® while providing a more sustainable solution without compromising final product performance. Yale is excited to be one of the first to partner with DSM Protective Materials on this commitment to realize a more sustainable product. Choose Sierra 78 for exceptional performance and a certified green product for your equipment.



Sustainable manufacturing with the **lowest carbon footprint**. And, now available as the first bio-based HMPE fiber.



the **service life** of generic HMPE fiber, thanks to improved fatigue performance



the **creep life** of any other HMPE fiber



better abrasion resistance than generic HMPE fiber

Specifications

Diameter Inches	Weight Lbs/100ft	Average Spliced Break Strength* Lbs	Minimum Spliced Break Strength* Lbs	Maximum** Work Load 5:1 Lbs
1/16	0.1	840	760	170
1/8	0.3	2,310	2,080	460
5/32	0.5	3,570	3,210	710
3/16	1.0	6,300	5,670	1,260
1/4	1.7	10,500	9,450	2,100
5/16	2.4	15,540	13,990	3,110
3/8	3.6	21,000	18,900	4,200
7/16	4.6	27,820	25,040	5,560
1/2	6.4	39,270	35,340	7,850
9/16	8.0	47,250	42,530	9,450
5/8	9.5	55,650	50,090	11,130
3/4	14.0	78,750	70,880	15,750
7/8	17.9	102,900	92,610	20,580
1	24.2	126,000	113,400	25,200
1-1/8	28.8	155,400	139,860	31,080
1-1/4	33.9	180,600	162,540	36,120
1-5/16	41.8	193,200	173,880	38,640
1-1/2	49.7	257,780	232,000	51,560
1-5/8	62.0	299,250	269,330	59,850
1-3/4	74.2	346,500	311,850	69,300
2	90.4	409,500	368,550	81,900

* Knots and abrupt bends significantly reduce the strength of all ropes and lower maximum working load.

** Working load is based on static or moderately dynamic lifting/pulling operations. Instantaneous changes in load, up or down, in excess or 10% of the rope's related working load constitute hazardous shock load and would void the normal working-load recommendation. Consult Yale Cordage for guidelines for working loads and the safe use of rope.

At Yale Cordage, we recognize that selecting the best fiber is as crucial to product performance as the engineering and design process. Our 70 years of experience in fiber technology and innovation allows us to deliver the best ropes and services to help you work smarter, not harder.

Choosing Sierra 78 means that your company is contributing to sustainable sourcing while providing your team and equipment with the most reliable product for the job.

Standard Characteristics

- Enhanced Dyneema® Fiber SK78
- ISCC Certified Eco Sustainable Fiber
- Maxijacket HP Coating - Yale Cordage
- Berry Compliant

Special Order Options

- Type X Enhanced Wear Coating
- SK99-DM20 Fiber Choices - Dyneema®
- XBO Finish - Dyneema®

Sustainability Value

- Strength
 - Fairlead Life
 - Price
 - Environmental Impact
- Note: the lower the bar, the better this product is for the environment.*

