

477-1

Ultimate Carbon Packing for Superior Sealing Performance

Unmatched Strength. Exceptional Flexibility. Advanced Sealing.

Chesterton® 477-1 is a next-generation carbon yarn packing engineered for unrivaled sealing performance and superior reliability. Designed with a low-modulus carbon fiber formulation, 477-1 delivers the exceptional strength of staple carbon fibers while maintaining outstanding flexibility—effectively reducing the brittleness found in conventional carbon packing.

- **Powerful Yet Pliable** – Strong enough to withstand high-stress environments, yet flexible for superior conformance and sealing.
- **Advanced Blocking Technology** – A high-purity dispersion of inorganic platelets effectively prevents gas and liquid penetration, yielding long-lasting performance.
- **Interbraid Construction for Maximum Integrity** – Engineered to lock in sealing agents, enhancing durability and preventing washout.

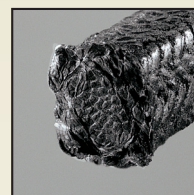
Chesterton 477-1 is built for demanding applications where leak-tight performance, durability, and reliability are critical. Elevate your sealing solution with industry-leading technology—because your equipment deserves the best.

Technical Data

Material	Low modulus carbon fiber
Size Low	3.2 mm (0.125")
Size High	25.4 mm (1")
Pressure Limit Stationary	250 bar g (3600 psig)
Pressure Limit Rotating	200 psig (14 bar g)
Speed Max	15 m/s (3000 fpm)
Temperature	-40°C – 565°C (-40°F – 1050°F)
Chemical Resistance	0 – 13 pH
Chemical Resistance Notes	Except with strong oxidizers

Applications

Virtually all pumps and valves against most solvents, gases, and other liquids.



- Strong, yet pliable, staple carbon fiber yarn.
- Unique inorganic blocking agent inhibits gas/liquid penetration
- Molybdenum-based corrosion inhibitor protects against stem pitting

477-1 Ordering Information				
Size		Packaged $\pm 10\%$		Item Number
mm	Inch	kg	lbs	
3.2	1/8	0.908	2	004752
4.7	3/16	0.908	2	004754
6.0	–	0.908	2	004756
6.4	1/4	0.908	2	004730
		2.270	5	004731
8.0	5/16	0.908	2	004733
		2.270	5	004734
9.5	3/8	0.908	2	004722
		2.270	5	004723
		4.540	10	004724
10.0	–	0.908	2	004758
		2.270	5	004759
11.0	7/16	0.908	2	004736
		2.270	5	004737
12.0	–	0.908	2	004782
		2.270	5	004791
12.7	1/2	0.908	2	004726
		2.270	5	004727
		4.540	10	004728
14.0	9/16	2.270	5	004739
		4.540	10	004740
16.0	5/8	4.540	10	004742
17.5	11/16	4.540	10	004744
19.0	3/4	4.540	10	004700
20.5	13/16	4.540	10	004793
22.0	7/8	4.540	10	004746
24.0	15/16	These sizes are available upon request.		
25.4	1	4.540	10	004748

Valve Services

- Steam valves to 565°C (1050°F)
- Hot water above 260°C (500°F)
- As end rings for Chesterton 1400R improve performance and reliability for valve sealing
- As a replacement for costly die-formed rings or wire-inserted packings when service demands permit

Rotating and Reciprocating Services

- Hot oil pumps
- Soot blowers
- Brown stock pumps
- High-speed refiners and hydropulpers
- Condensate and boiler feed pumps

Chesterton ISO certificates available on
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