



## Nexus Pump and Valve Packing

### DATA SHEET



### **Nexus Style 9122 Packing**

#### **Description**

Style 9122 packing is a combination of Expanded Graphite and Carbon Yarn with a passive corrosion inhibitor. The benefit of Expanded Graphite packing is enhanced by the tensile strength of Carbon Yarn which is used to reinforce each graphite strand. The additional Carbon internal "Corner Post" increases the resistance to extrusion while increasing the pressure capability of the product. Due to the fact that the Carbon Corner Posts are not in contact with the shaft/stem of the equipment, there is no fear of the sealed product passing through the packing in the case of valves, or of the corners causing damage to the rotating shaft in the case of pumps.

#### **Construction**

Style 9122 is a braided packing constructed of braided Expanded Graphite tape that has been formed into a yarn, together with superior quality Carbon Yarn both in the corner posts of the packing as well as in each graphite strand used to braid the packing, resulting in a double reinforcing of the end product.

#### **Application**

This product is ideally suited for both pump and valve applications. The very low coefficient of friction, extreme temperature resistance and thermal conductivity of the material lends itself to be an outstanding product for water reduction programs. Worn sleeves or shafts prove to be a problem for standard packing, while the graphite in Style 9122 has the ability to conform to the available space and the carbon yarn prevents the packing from falling apart. Typical applications include Agitators, high speed pumps, pulp and paper applications, hydrocarbon and steam valves.

#### **Size and Weight**

Style 9122 Packing										
mm	3	4	5	6	7	8	10	11	12	13
inch	1/8	5/32	3/16	1/4		5/16	3/8	7/16	1/2	
m/kg	90	56	39	23	18	15	9	7.5	6	5.4
mm	14	15	16	18	19	20	22	24	25	
inch	9/16		5/8	11/16	3/4	13/16	7/8	15/16	1	
m/kg	4.6	4	3.6	2.8	2.5	2.2	1.9	1.6	1.4	

#### **Specification**

<u>Item</u>	<u>Unit</u>	<u>Magnitude</u>
Dimensional Deviation	mm	Axial 0.00 ~ +0.50
		Radial 0.00 ~ -0.50
Carbon Content in Graphite	%	>98
Ash Content in Graphite	%	<1.5
Volumetric Density	g/cm <sup>3</sup>	1.0 ~ 1.3
Compressibility	%	25 ~ 45
Resilient Rate	%	>15
Working Temperature	°C	-200 ~ +450 (Oxidising)
		-200 ~ +650 (Non-oxidising)
Pressure	bar	35 Rotary (Pumps)
		300 Stationary (Valves)
Ignition Loss	%	<10 (300°C @ 3 hours)
Friction Factor		<0.18
Surface Speed	m/sec	20
pH	pH	0 - 14
Base Yarn		Expanded Graphite Tape
Reinforcement		Carbon Filament Yarn