



## WILLIAM JOHNSTON & COMPANY LIMITED

Glasgow Tel: +44 (0) 141 620 1666 | Inverness Tel: +44 (0) 1463 238 673  
[sales@williamjohnston.co.uk](mailto:sales@williamjohnston.co.uk) | [www.williamjohnston.co.uk](http://www.williamjohnston.co.uk)

### White Super Soft High Abrasion Natural Rubber 38 Shore WJ138

FDA 21 CFR177-2600 and EU 1935/2004 compliant

PROPERTIES	TEST METHOD	VALUES FPS UNITS	TEST METHOD	VALUES METRIC UNITS
SPECIFIC GRAVITY	DIN 53508	0.98 ± 0.05	ASTM D297	0.98 ± 0.05
HARDNESS	DIN 53505	38 ± 5 SH A	ASTM D2240	38 ± 5 SH A
TENSILE STRENGTH (KG/CM2)	DIN 53504	2986 PSI	ASTM D412	240 KG/CM2
ELONGATION AT BREAK (MIN)	DIN 53504	810%	ASTM D412	810%
ABRASION RESISTANCE (MAX)	DIN 53516	80 MM3	ASTM D5963	80 MM3
COMPRESSION SET (70 °C/24 HRS/25% SET) (MAX)	DIN 53517	15 %	ASTM D395 METHOD	15 %
POLYMER CONTENT (%)		100		100
TEAR RESISTANCE (ANGULAR) MIN	DIN 53515	224 LBS/INCH	ASTM D624	40 KG/CM
RESILIENCE		75%		75%
CHANGE IN PROPERTIES				
HEAT AGEING (72 HRS. AT 70°C)			ASTM D573	
--- HARDNESS (PTS)		+ 3 (MAX)		+ 3 (MAX)
--- TENSILE STRENGTH (%)		+10 / - 15		+10 / - 15
--- ELONGATION AT BREAK (%)		+10 / - 15		+10 / - 15
FOOD GRADE COMPLIANCE	US FDA 21 CFR 177.2600	YES		YES
CHEMICAL RESISTANCE				
--- OZONE		FAIR		FAIR
--- DILUTE ACIDS AND BASES		GOOD		GOOD
--- CONCENTRATED ACIDS AND BASES		NOT RECOMMENDED		NOT RECOMMENDED
--- OILS		NOT RECOMMENDED		NOT RECOMMENDED
--- SOLVENTS		NOT RECOMMENDED		NOT RECOMMENDED
TEMPERATURE RANGE		-30° TO + 70° C		-30° TO + 70° C
COLOUR		OFF WHITE		

SR. NO	NAME OF PARAMETER	RESULT	UNIT	MAX LIMIT	TEST METHOD
1	N-HEXANE EXTRACT FOR FIRST 7 HRS.	29.5	MG/INCH <sup>2</sup>	175 MG/INCH <sup>2</sup>	LIMIT AND TEST METHOD AS PER US-FDA 21.CFR.177.2600
2	N-HEXANE EXTRACT FOR SUCCEEDING 2 HRS	3.50	MG/INCH <sup>2</sup>	4 MG/INCH <sup>2</sup>	
3	DISTILLED WATER EXTRACT FOR FIRST 7 HRS	1.3	MG/INCH <sup>2</sup>	20 MG/INCH <sup>2</sup>	
4	DISTILLED WATER EXTRACT FOR SUCCEEDING 2 HRS	0.60	MG/INCH <sup>2</sup>	1 MG/INCH <sup>2</sup>	

**Notes:**

1. For Sr. No1 & 2 sample extracted with n-Hexane at reflux temperature.
2. For SR. No. 3 7 4 sample extracted with distilled water at reflux temperature

**Disclaimer**

Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.