



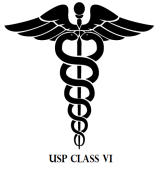
EC1935/2004



Complies with FDA Food Contact Regulation 21 CFR177-2600



WILLIAM JOHNSTON & COMPANY LIMITED



USP CLASS VI

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

Translucent Silicone Food Quality – 60° shore WJ14304

FDA 21 CFR No: 177 – 2600 & EU1935/2004 regulations and USP Class V1 Compliant

PROPERTIES	TEST METHOD	VALUES FPS UNITS	TEST METHOD	VALUES METRIC UNITS
SPECIFIC GRAVITY	DIN 53508	1.2±0.05	ASTM D297	1.2±0.05
HARDNESS	DIN 53505	60 ± 5 SH A	ASTM D2240	60 ± 5 SH A
TENSILE STRENGTH (MIN)	DIN 53504	853 PSI	ASTM D412	100 KG/CM2
ELONGATION AT BREAK (MIN)	DIN 53504	250%	ASTM D412	250%
COMPRESSION SET (70° C/24 HRS/25% SET) (MAX)	DIN ISO 815-1	40%	ASTM D395 METHOD B	40%
POLYMER CONTENT (%)		100		100
TEAR RESISTANCE (ANGULAR) MIN	DIN 53515	112 LBS/INCH	ASTM D624	20 KG/CM
CHANGE IN PROPERTIES				
HEAT AGEING (72 HRS. AT 100 °C)			ASTM D573	
--- HARDNESS (PTS)		+ 3 (MAX)		+ 3 (MAX)
--- TENSILE STRENGTH (%)		±5		±5
--- ELONGATION AT BREAK (%)		±5		±5
VOLUME SWELL: AT 70° C FOR 72 HRS/IN			ASTM D 471	
IRM OIL NO.1		+ 5%		+ 5%
IRM OIL NO.2		+ 7%		+ 7%
IRM OIL NO.3		+ 25%		+ 25%
CHEMICAL RESISTANCE				
--- OZONE		EXCELLENT	ASTM D 1149	EXCELLENT
--- DILUTE ACIDS AND BASES		EXCELLENT		EXCELLENT
--- CONCENTRATED ACIDS AND BASES		EXCELLENT		EXCELLENT
--- OILS		GOOD		GOOD
--- SOLVENTS		FAIR		FAIR
TEMPERATURE RANGE		-60 ° TO + 225° C		-60 ° TO + 225° C
COLOUR	TRANSLUCENT			

Test No. 1-i) Sensory verification of Odour/Smell

Test Specification(s)/Regulation(s): Regulation (EC) No. 1935/2004 & Council of Europe Resolution ResAP (2004) 5 on silicones to be used for food contact applications.

Test method adopted: DIN 10955:2004.

Simulant(s) used: Distilled Water.

Test Condition(s): 100°C or reflux for 4 hours.

COMPONENT NO.	TEST PARAMETER	RESULT (GRADE)	COMPLIANCE REQUIREMENT/LIMIT MAX	CONCLUSION (PASS/FAIL)
A	RATING	1	LESS THAN 2.5	PASS

NOTE:
(INTERMEDIATE GRADES ARE ALLOWED)
0 = NO PERCEPTIBLE DIFFERENCE IN ODOUR.
1 = JUST PERCEPTIBLE DIFFERENCE IN ODOUR (STILL DIFFICULT TO DEFINE).
2 = SLIGHT DIFFERENCE IN ODOUR.
3 = MARKED DIFFERENCE IN ODOUR.
4 = STRONG DIFFERENCE IN ODOUR.

(Test No. 1-ii) Sensory verification of Taste

Test specification(s)/Regulation(s): Regulation (EC) No. 1935/2004 & Council of Europe Resolution ResAP (2004) 5 on silicones to be used for food contact applications.

Test method adopted: DIN 10955:2004.

Simulant(s) used: Distilled water

Test condition(s): 100°C or reflux for 4 hours.

COMPONENT NO.	TEST PARAMETER	RESULT (GRADE)	COMPLIANCE REQUIREMENT/LIMIT MAX	CONCLUSION (PASS/FAIL)
A	RATING	0	LESS THAN 2.5	PASS

Note:
(INTERMEDIATE GRADES ARE ALLOWED)
0 = NO PERCEPTIBLE DIFFERENCE IN TASTE.
1 = JUST PERCEPTIBLE DIFFERENCE IN TASTE (STILL DIFFICULT TO DEFINE).
2 = SLIGHT DIFFERENCE IN TASTE.
3 = MARKED DIFFERENCE IN TASTE.
4 = STRONG DIFFERENCE IN TASTE.
4 = STRONG DIFFERENCE IN ODOUR.

Test No. 2) Overall Migration**Test specification(s)/Regulation(s):** Council of Europe Resolution ResAP (2004) 5 on silicones to be used for food contact applications.**Test method(s) adopted:** With reference to EN 1186-3:2002 (for 3% acetic acid) &EN 1186-14:2002 (for 95% ethanol and iso-octane).**Simulant(s) used:** Refer below.**Test Condition(s):** Refer below (Note: Tests conducted under repeat conditions).

S.NO	SIMULANT USED	TEST CONDITION(S)	COMPONENT NO.	RESULT (MG/DM ²)	COMPLIANCE REQUIREMENT/ LIMIT MAX. (MG/DM ²)	CONCLUSION (PASS/FAIL)
1.	3% ACETIC ACID	10°C OR REFLUX FOR 4 HOURS	A	ND	10	PASS
2.	95% ETHANOL	60°C FOR 6 HOURS	A	ND	10	PASS
3.	ISO-OCTANE	60°C FOR 4 HOURS	A	ND	10	PASS
OVERALL CONCLUSION (PASS/FAIL)						PASS
LIMITED OF QUANTIFICATION: 2.0 MG/DM ²						
NOTE: (1) "MG/DM ² " DENOTES MILLIGRAM PER SQUARE DECIMETRE; (2) "°C" DENOTES DEGREE CELSIUS; (3) "%" DENOTES PERCENT; (4) "ND" DENOTES NOT DETECTED.						

(Test No. 3) Specific migration of formaldehyde (CAS No. 50-00-0)**Test specification(s)/Regulation(s):** Council of Europe Resolution RedAP (2004) 5 on silicones to be used for food contact applications.**Test method(s) adopted:** With reference to EN 13130-1:2004 followed by analysis as per DD CEN/TS 13130-23:2005.**Simulant(s) used:** Refer below.**Test condition(s):** Refer below (Note: Tests conducted under repeat use conditions).

S.NO	SIMULANT USED	TEST CONDITION(S)	COMPONENT NO.	RESULT (MG/DM ²)	COMPLIANCE REQUIREMENT/ LIMIT MAX	CONCLUSION (PASS/FAIL)
1.	3% ACETIC ACID	10°C OR REFLUX FOR 4 HOURS	A	ND	15 MG/KG	PASS
2.	95% ETHANOL	60°C FOR 6 HOURS	A	ND	15 MG/KG	PASS
3.	ISO-OCTANE	60°C FOR 4 HOURS	A	ND	15 MG/KG	PASS
OVERALL CONCLUSION (PASS/FAIL)						PASS
LIMITED OF QUANTIFICATION: 10 MG/DM						
NOTE: (1) "MG/DM ² " DENOTES MILLIGRAM PER SQUARE DECIMETRE; (2) "°C" DENOTES DEGREE CELSIUS; (3) "%" DENOTES PERCENT; (4) "ND" DENOTES NOT DETECTED.						

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.