

# TEST REPORT

Issue No. : 20180801-33810506-001

Testing procedures comply with ISO8655 - 6 standards.

Pipette type : Nichipet EX II MULTI 12L  
 Serial No. : SampleM01  
 Tip No. : BMT2-SG  
 Volume range : 20 — 200 ul  
 Protocol No. : 0220

JIS K 0970  
 Room temperature : 20.0 °C Water temperature : 21.0 °C  
 Air pressure : 1000.0 hPa  
 Correction value Z : 1.003100 ul/mg  
 Relative humidity : 60.0 %  
 Basis of adjustment : Ex ( to delivery )

Test . 1	Test volume : 20 ul		No. of Test : 6						Limit value (es) : ± 16.00 %			Limit value (CV) : < 6.00 %		
Nozzle No. :	1	2	3	4	5	6	7	8	9	10	11	12		
Data 01 :	19.70	19.76	19.82	19.88	19.94	20.00	20.06	20.12	20.18	20.24	20.30	20.36		
Data 02 :	19.71	19.77	19.83	19.89	19.95	20.01	20.07	20.13	20.19	20.25	20.31	20.37		
Data 03 :	19.72	19.78	19.84	19.90	19.96	20.02	20.08	20.14	20.20	20.26	20.32	20.38		
Data 04 :	19.73	19.79	19.85	19.91	19.97	20.03	20.09	20.15	20.21	20.27	20.33	20.39		
Data 05 :	19.74	19.80	19.86	19.92	19.98	20.04	20.10	20.16	20.22	20.28	20.34	20.40		
Data 06 :	19.75	19.81	19.87	19.93	19.99	20.05	20.11	20.17	20.23	20.29	20.35	20.41		
Mean value (ul) :	19.73ul	19.79ul	19.85ul	19.91ul	19.97ul	20.03ul	20.09ul	20.15ul	20.21ul	20.27ul	20.33ul	20.39ul		
Systematic error (es) :	-1.37 %	-1.07 %	-0.77 %	-0.47 %	-0.17 %	0.13 %	0.43 %	0.74 %	1.03 %	1.33 %	1.64 %	1.94 %		
Random error (CV) :	0.10 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %	0.09 %		
Test results :	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed		

Test . 2	Test volume : 200 ul		No. of Test : 6						Limit value (es) : ± 1.60 %			Limit value (CV) : < 0.60 %		
Nozzle No. :	1	2	3	4	5	6	7	8	9	10	11	12		
Data 01 :	200.26	200.32	200.38	200.44	200.50	200.56	200.62	200.68	200.74	200.80	200.86	200.92		
Data 02 :	200.27	200.33	200.39	200.45	200.51	200.57	200.63	200.69	200.75	200.81	200.87	200.93		
Data 03 :	200.28	200.34	200.40	200.46	200.52	200.58	200.64	200.70	200.76	200.82	200.88	200.94		
Data 04 :	200.29	200.35	200.41	200.47	200.53	200.59	200.65	200.71	200.77	200.83	200.89	200.95		
Data 05 :	200.30	200.36	200.42	200.48	200.54	200.60	200.66	200.72	200.78	200.84	200.90	200.96		
Data 06 :	200.31	200.37	200.43	200.49	200.55	200.61	200.67	200.73	200.79	200.85	200.91	200.97		
Mean value (ul) :	200.28ul	200.34ul	200.40ul	200.46ul	200.52ul	200.58ul	200.64ul	200.71ul	200.77ul	200.83ul	200.89ul	200.95ul		
Systematic error (es) :	0.14 %	0.17 %	0.20 %	0.23 %	0.26 %	0.29 %	0.32 %	0.35 %	0.38 %	0.41 %	0.44 %	0.47 %		
Random error (CV) :	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %		
Test results :	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed		

Balance : Sartorius MSE225P-000-DI auto door (Online measurement)  
 Balance No. : 33810506  
 Thermometer : HP22-A  
 Thermometer No. : 60813717  
 Water temperature meter No. : TM-40  
 Identification of operator : T.Nichiryō.  
 Test Date : 2018/08/01.  
 Date printed : 2018/08/01

Signature : *Nichiryō Taro's*

*Nichiryō Co., Ltd.*