

## **TECHNICAL DATA SHEET**

## **INTRAVENOUS SYRINGES**

Product Name	Luer Lock IV Syringe (IVL)						
	Luer Slip IV Syringe (IVS)						
Product Range	IVL01, IVL03, IVL05, IVL10, IVL20, IVL30, IVL60, IVL60 (INS).						
Troduct hange	IVS01, IVS03, IVS05, IVS10, IVS20, IVS30, IVS60, IVS01 (INS), IVS10E.						
	Medicina Ltd						
Manufacturer	Units 1-4 Rivington View Business Park						
	Station Road, Blackrod						
	Bolton BL6 5BN						
	Luer Lock IV Syringe (IVL) - Single Use Sterile Luer lock IV syringes for use with IV extension sets,						
	standard or safety needles, and IV cannula. They are also designed to be used on the most						
	common types of syringe drivers.						
Intended Use	Luer Slip IV Syringe (IVS) - Single Use Sterile Luer Slip IV syringes can be used together with						
	hypodermic needles, and are intended to be used intravenously, to deliver drugs or take blood						
	from the patient.						
	Barrel & Plunger Polypropylene (PP)						
Product Material	Piston	Poly-Isoprene (Latex Free)					
Composition	Lubricant	High Grade Silicone Oil					
Classification	Class IIa						
Conformity							
Assessment Route	MDD 93/42/EEC, Annex V, Rule 2						
Notified Body	SGS 0120						
Certificate Ref	GB12/84913						
Shelf Life	5 Years						
Lot Number							
format	YYMMDD – XX (Where Y is Year, M is Month, D is Date) (X is product size)						
Charrage	To be stored at a minimum of 5°C and a maximum of 35°C with a maximum relative humidity of						
Storage	80%.						
	General	All components (product, pouches, and boxes) should be free of damage,					
		no tears or holes.					
	Product Blister	Shall contain individually packed syringe.					
	Inner Box	White inner box containing secondary packaging					
	Shipping	Drown Chipping Conton Chould be free of any major demos					
	Carton	Brown Shipping Carton Should be free of any major damage.					
Appearance	Syringe	Syringe free from defects; fins, burrs, plastic flow and material shortage.					
		Syringe barrel shall be transparent to see fiducial line clearly. Syringe Barrel					
		with accurate readable graduations and no smearing					
		All print should be legible and clearly seen.					
		Plunger will be attached to black piston and shall be intact.					
		Shall be free from blooming and foreign matters. The surface shall be free					
	Piston	from cracks, cutting, damage and uneven surfaces.					
		Outer diameter of the piston shall be equal or shorter than the outer					
		diameter of the piston sealing ring.					



Labelling and	aster file.								
Symbols	Symbols	Shall match the copies in artwork master file.							
Product Packaging Material Composition	Blister Packaging	Paper Layer: 100% Whole virgin wood pulp Blister: Polyethylene terephthalate (PET)+ Polyethylene (PE)							
	Seal Dimension	Seal line will be fully sealed. Heat sealed blister with seal width no less than $4mm \pm 1 mm$ width on all sides.							
Blister Packaging Performance	Seal strength	Tested as per BS EN 868-5 tested on a 15 mm sample should be > 1.5 N							
	Leak test performed on Blister	Detecting seal leaks in porous packages by dye penetration according to YY/T 0681.4-2010.							
	Method	Ethylene Oxide (ETO) sterilised							
Sterility	<b>Re-sterilisation</b>	Device should not be re-sterilised							
	ETO Residuals	ETO residuals Shall be ≤ 10ug/ml							
	Pyrogen	Product free	from pyrogen						
	Sterilisation Indication	Sterilisation Indicator label affixed to the outer carton will be red before sterilisation and blue after sterilisation. Each outer carton shall be labelled with the respective cycle Reference number.							
Chemical Performance	pH Value	pH Value difference between extract and blank solution shall not exce 1.0 pH Extract solution: Purified water + Sample. Blank Solution: Purified water. Note, the quantity of extract solution is based on the nominal capacity the syringe							
	Readily	The syringe	extract solution and equ	al volume of blank solutio	n to indirect				
	Oxidizable	titrations as per Standard GB/T14233.1, the amount of KM <sub>n</sub> O <sub>4</sub> consumption							
	substance	shall not exceed 0.5ml.							
	Conical Fitting	No Evident rocking or movement. Shall comply with ISO 594.							
		There shall be no air leakage when syringe is under negative pressure 88Kpa for 60s + 5s at the contacting position between barrel and pist The piston will not detach from plunger.							
	Leakage	88Kpa for 60 The piston w	s + 5s at the contacting vill not detach from plun	position between barrel a ger.	ressure nd piston.				
	Leakage	88Kpa for 60 The piston w Nominal capacity of	s + 5s at the contacting vill not detach from plun <b>Tolerance on gr</b>	position between barrel a ger. aduated capacity	nd piston. Maximum				
	Leakage	88Kpa for 60 The piston w Nominal capacity of syringe, V (ml)	rill not detach from plun Tolerance on gr Less than half nominal capacity	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity	nd piston. Maximum Dead Space (ml)				
	Leakage	88Kpa for 60 The piston w Nominal capacity of syringe, V (ml) V < 2	to s + 5s at the contacting vill not detach from plun Tolerance on gr Less than half nominal capacity ±(1.5% of V + 2% of expelled volume)	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity ± 5% of expelled Volume	ressure nd piston. Maximum Dead Space (ml) 0.07				
Physical Performance	Leakage	Nominal capacity of syringe, V (ml) V < 2 $2 \le V < 5$	os + 5s at the contacting vill not detach from plun Tolerance on gr Less than half nominal capacity ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 2% of expelled volume)	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity ± 5% of expelled Volume ± 5% of expelled Volume	Maximum Dead Space (ml) 0.07 0.07				
Physical Performance	Leakage Capacity Tolerance	Nerve shall a $88$ Kpa for 60The piston wNominalcapacity ofsyringe, V(ml) $V < 2$ $2 \le V < 5$ $5 \le V < 10$	bs + 5s at the contacting vill not detach from plun Tolerance on gr Less than half nominal capacity $\pm(1.5\% \text{ of V} + 2\% \text{ of}$ expelled volume) $\pm(1.5\% \text{ of V} + 2\% \text{ of}$ expelled volume) $\pm(1.5\% \text{ of V} + 1\% \text{ of}$ expelled volume)	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity ± 5% of expelled Volume ± 5% of expelled Volume ± 4% of expelled Volume	ressure nd piston. Maximum Dead Space (ml) 0.07 0.07 0.075				
Physical Performance	Leakage Capacity Tolerance	88Kpa for 60The piston wNominalcapacity ofsyringe, V(ml) $V < 2$ $2 \le V < 5$ $5 \le V < 10$ $10 \le V < 20$	s + 5s at the contacting vill not detach from plun Tolerance on gr Less than half nominal capacity ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 1% of expelled volume) ±(1.5% of V + 1% of expelled volume)	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity ± 5% of expelled Volume ± 5% of expelled Volume ± 4% of expelled Volume ± 4% of expelled Volume	ressure nd piston. Maximum Dead Space (ml) 0.07 0.07 0.075 0.1				
Physical Performance	Leakage Capacity Tolerance	Nicic Sidure88Kpa for 60The piston wNominalcapacity ofsyringe, V(ml) $V < 2$ $2 \le V < 5$ $5 \le V < 10$ $10 \le V < 20$ $20 \le V < 30$	bs + 5s at the contacting fill not detach from plun Tolerance on gr Less than half nominal capacity ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 1% of expelled volume) ±(1.5% of V + 1% of expelled volume) ±(1.5% of V + 1% of expelled volume)	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity ± 5% of expelled Volume ± 5% of expelled Volume ± 4% of expelled Volume ± 4% of expelled Volume	ressure nd piston. Maximum Dead Space (ml) 0.07 0.07 0.075 0.1 0.15				
Physical Performance	Leakage Capacity Tolerance	Nicre shall e $88$ Kpa for 60The piston wNominalcapacity ofsyringe, V(ml) $V < 2$ $2 \le V < 5$ $5 \le V < 10$ $10 \le V < 20$ $20 \le V < 30$ $30 \le V < 50$	bs + 5s at the contacting rill not detach from plun Tolerance on gr Less than half nominal capacity ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 2% of expelled volume) ±(1.5% of V + 1% of expelled volume)	position between barrel a ger. aduated capacity Equal to or greater than half nominal capacity ± 5% of expelled Volume ± 5% of expelled Volume ± 4% of expelled Volume ± 4% of expelled Volume ± 4% of expelled Volume	ressure nd piston. Maximum Dead Space (ml) 0.07 0.07 0.07 0.075 0.1 0.15 0.17				



	Nominal Capacity of syringe, V (ml)	ty Initial Force,		Mean Force, F Max (N)	lean Force, F Maxim Max (N) N		Minimum Force, F Min (N)
Sliding Performance	V< 2	10		5	(2,0 measured ) or (measured+1,5N), whichever is higher		(0,5 measured ) or (measured–1,5N), whichever is the lower
	2 ≤ V < 50	25		10	(2,0 measured ) or (measured +1,5N), whichever is higher		(0,5 measured ) or (measured–1,5N), whichever is the lower
	50 ≤ V	30		15	(2,0 measured ) or (measured +1,5N), whichever is higher		(0,5 measured ) or (measured–1,5N), whichever is the lower
	When syringe is fil not be moved by it	led with wate	r up to	o its nominal capad	city and	kept vertical	ly, the plunger shall
	Variable Size (when X is replaced by product code)			Max Division value		Max Increment of numbering	
Graduation Lines	xxx01			0.1		0.01	
	xxx03			0.5		0.1	
	xxx05			1		0.2	
	xxx10		1			0.2	
	xxx20			5		1	
	xxx30			10		1	
	xxx60			10		1	
	Latex T	This product is free from Latex					
	Phthalates T	This product is free from Phthalates					
	Animal						
Product	<b>Derived</b>	This product is free from Animal Derived Substances					
Inclusions	Substances						
	Bis Phenol A	This product is free from Bis Phenol A					
	Asbestos T	This product is free from Asbestos					
	PCB's T	This product is free from PCB's					
Product Disposal	т r	The user must follow the legal regulations and national codes of practice regarding disposal of hospital waste.					



