

# LiHa Disposable Tips.

## DATA SHEET

### PRODUCT DESCRIPTION

Manufacturing is automated in a controlled environment, using state of the art production processes, integrated quality controls procedures and premium raw materials.

#### PACKAGING

Product Type	Tecan Standard Tips	Tecan Pure Tips	Tecan Sterile Tips
Contents per Sales Unit	200 µl tips: 96 tips/tray, 180 trays, 17280 tips 1000 µl tips: 96 tips/tray, 100 trays, 9600 tips	For 10, 50, 200 and 1000 µl tips: 96 tips/tray, 24 trays, 2304 tips Nested 350 µl and 10 µl tips: 16 racks x 480 tips, 7680 tips/sales unit 5000 µl tips: 10 racks x 24 tips, 240 tips/sales unit	For 50, 200 and 1000 µl tips: 40 racks x 96 tips, 3840 tips/sales unit Nested 350 µl and 10 µl tips: 16 racks x 480 tips, 7680 tips/sales unit 5000 µl tips: 10 racks x 24 tips, 240 tips/sales unit
Lot number	Fully traceable to year, week and day.		

#### PRODUCT PART NUMBERS

##### Hanging tip format

Tip size	Tecan Standard	Tecan Standard Filter	Tecan Pure	Tecan Pure Filter
10 µl	-	-	30104803	30104804
50 µl	-	-	30032115	30032114
200 µl	10612510, 10612552	10612511, 10612553	30000627	30000629
1000 µl	10612512, 10612554	10612513, 10612555	30000630	30000631
1000 µl wide bore	-	-	-	30115239

##### ANSI/SLAS format box

	Tecan Pure	Tecan Pure Filter	Tecan Sterile	Tecan Sterile Filter
10 µl	30104973	30104974	30104975	30104976
10 µl nested	30104977	30104978	-	30104979
50 µl	30057811	30057813	30057818	30057819
200 µl	30057814	30057815	30057820	30057821
350 µl nested	30083400	-	30083401	-
1000 µl	30057816	30057817	30057822	30057823
5000 µl	30059897	30065423	-	30059898

### DISPOSABLE TIP DESCRIPTION

#### PRODUCT CHARACTERISTICS

Description	Conductive pipette tips for automation		
Material	Tip Polypropylene (PP), black	Filter Polyethylene (PE), white	Tray Polycarbonate (PC) or Polystyrene (PS) with color coding to indicate different volumes

#### PIPETTING PERFORMANCE

Pipetting performance are for Freedom EVO® and for Fluent®, Pipetting ranges given in brackets, represent the maximal pipetting of tips with a filter. The pipetting performances given below are not values that are required to be met in IQ/OQ procedures.

Tip size	Length (total)	Orifice (ID)	Volume range (aqueous solution)	Pipetting performance of Air LiHa CV (aque. Sol.)	Pipetting performance of Air FCA CV (aque. Sol.)
10 µl	35.3 mm	0.34 mm	0.5-10 µl	< 6% at 0.5 µl < 4% at 1.0 µl < 1% at 10 µl	< 6% at 0.5 µl < 1.0% at 10 µl
50 µl	58.0 mm	0.36 mm	0.5-50 µl (45µl)	< 4% at 1.0 µl < 1.0% at 5 µl < 0.5% at 50 µl	< 4% at 1.0 µl < 0.5% at 10 µl
200 µl	58.5 mm	0.50 mm	3.0-200 µl (190µl)	< 4% at 3 µl < 0.5% at 100 µl	< 2% at 10µl < 0.2% at 200 µl
350 µl	58.3 mm	0.48 mm	3.0-350 µl	< 5% at 3 µl < 0.5% at 100 µl < 0.5% at 350 µl	< 2% at 10 µl < 0.2% at 200 µl



## PIPETTING PERFORMANCE

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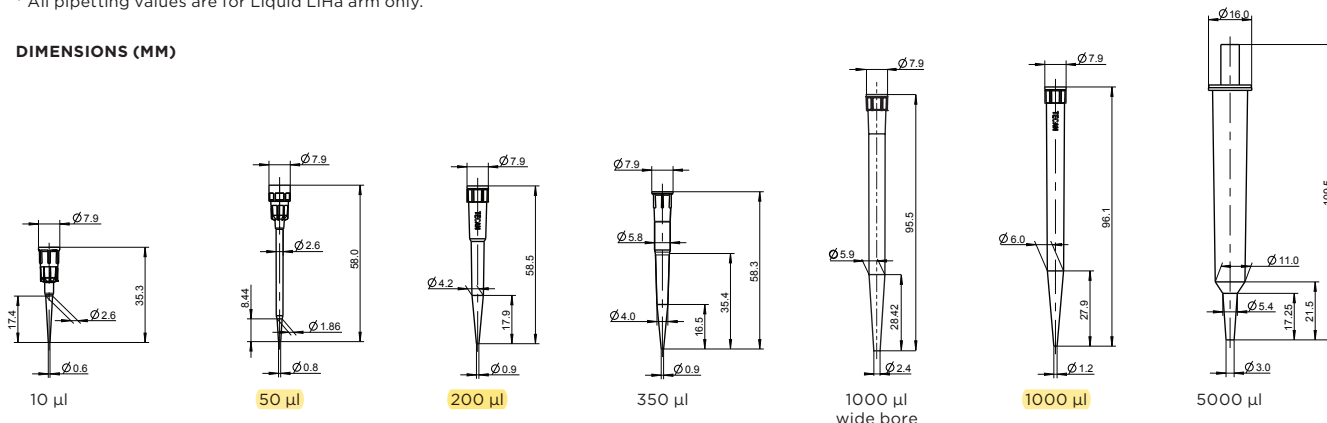
Tip size	Length (total)	Orifice (ID)	Volume range (aqueous solution)	Pipetting performance of Air LiHa CV (aque. Sol.)	Pipetting performance of Air FCA CV (aque. Sol.)
1000 µl	96.1 mm	0.80 mm	25–1000 µl (970 µl)	< 1.5% at 10 µl < 0.5% at 100 µl < 0.5% at 500 µl < 0.5% at 1000 µl	< 1.2% at 10 µl < 0.3% at 100 µl
1000 µl wide bore	95.5 mm	1.5 mm	20–900 µl	< 2% at 20 µl < 0.5% at 100 µl < 0.5% at 900 µl	< 2% at 20 µl < 0.5% at 100 µl < 0.5% at 900 µl
5000 µl*	109.5 mm	1.50 mm	300–4850 µl (4800 µl)	< 2.5% at 300 µl < 0.5% at 4500 µl	

Pipetting performance of Air LiHa: Typical pipetting precision defined as the worst value of at least three tested instruments, with deionized water, standard liquid class parameters, free dispense and single pipetting mode. Under optimized conditions for 10 µl and 50 µl DiTi's single channel calibration required below 5 µl.

Pipetting performance of Air FCA: Using deionized water in single pipetting mode under optimized conditions; free dispense.

\* All pipetting values are for Liquid LiHa arm only.

## DIMENSIONS (MM)



## PURITY LEVELS AND STERILITY

Purity level	Tecan Standard	Tecan Pure	Tecan Sterile
	Tecan Standard quality	Free from human DNA, DNase, RNase and PCR inhibitors	Free from human DNA, DNase, RNase, pyrogens and endotoxins
Sterilization	None	None	By irradiation

General information about the Tecan purity levels can be found on the Tecan homepage: [www.tecan.com](http://www.tecan.com) -> Life Sciences -> Products -> Consumables -> Disposable tips

## FEATURES

Transport and storage conditions	Product must be transported and stored dry as well as protected from direct solar radiation.		
Chemical resistance	See Operating Manual Freedom EVO (Doc no. 392886), Chapter 3.7.1 Standard Material Resistance Table.		
Shelf life	Tecan Standard 5 years (after production)	Tecan Pure 5 years (after production)	Tecan Sterile 4 years (after production)
Autoclavability	Not permitted	Not permitted	Not permitted

## LIQUID HANDLING DEVICES

Compatible	With Freedom EVO® 100, 150 or 200 with Liquid Handling Arm™ or Air LiHa, Freedom EVO75 8+1 and Fluent® with Flexible Channel Arm™ (FCA). The 5000 µl LiHa tips are not compatible with Freedom EVO 8+1 and Air LiHa and Air FCA.		
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## FURTHER INFORMATION

ANSI/SLAS format	LiHa disposable tip products are available in boxes with ANSI/SLAS format footprint (127.8 x 85.5 mm).			
Dimensions of boxes	Small Box (up to 1000 µL tips): Height with lid 68.2 mm Height without lid 65.4 mm	Big Box (1000 µL tips): Height with lid 109.2 mm Height without lid 106.1 mm	5er nest (10, 350 µL tips): Height with lid 152.8 mm Height without lid (tips) 149.6 mm	5 mL Tip Box: Height with lid 126 mm Height without lid 150 mm

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Contact your nearest Tecan office or visit [www.tecan.com/consumables](http://www.tecan.com/consumables)

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