# 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 μΙ	-	-	30104803	30104804	
50 μΙ	-	=	30032115	30032114	
200 μΙ	10612510, 10612552	10612511, 10612553	30000627	30000629	
1000 μΙ	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 μΙ	30104973	30104974	30104975	30104976	
10 μl nested	30104977	30104978	, -	30104979	
50 μΙ	30057811	30057813	30057818	30057819	
200 μΙ	30057814	30057815	30057820	30057821	
350 μl nested	30083400	-	30083401	-	
1000 μΙ	30057816	30057817	30057822	30057823	
E000 III	70050907	7006F427		70050000	

# **DISPOSABLE TIP DESCRIPTION**

## PRODUCT CHARACTERISTICS

Description	Conductive pipette tips for automatio	n	
Material	<b>Tip</b> Polypropylene (PP), black	Filter Polyethylene (PE), white	<b>Tray</b> 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	<b>Length</b> (total)	Orifice (ID)	Volume range (aqueous solution)	Pipetting performance of Air LiHa CV (aque. Sol.)	Pipetting performance of Air FCA CV (aque. Sol.)
10 μΙ	35.3 mm	0.34 mm	0.5-10 μΙ	< 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 μΙ	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 μΙ	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 μΙ	58.3 mm	0.48 mm	3.0-350 μΙ	< 5% at 3 μl < 0.5% at 100 μl < 0.5% at 350 μl	< 2% at 10 μl < 0.2% at 200 μl

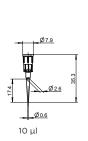
Pipetting performance are for Freedom EVO\* and for Fluent\*. The pipetting performances given below are not values that are required to be met in IQ/OQ procedures.

Tip size	Length (total)	Orifice (ID)	<b>Volume range</b> (aqueous solution)	Pipetting performance of Air LiHa CV (aque. Sol.)	Pipetting performance of Air FCA CV (aque. Sol.)
1000 μΙ	96.1 mm	0.80 mm	25-1000 μl (970μl)	< 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 μΙ	< 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 μΙ*	109.5 mm	1.50 mm	300-4850 µl (4800 µl)	< 2.5% at 300 μl < 0.5% at 4500 μl	

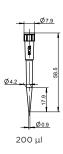
Pipetting performance of Air LiHa: Typical pipetting precision defined as the worst value of at least three tested instruments, with deionized water, standard liquid class parameters, free dispense and single pipetting mode. Under optimized conditions for 10µl and 50µl DiTi's single channel calibration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

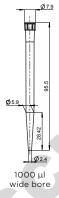
# **DIMENSIONS (MM)**

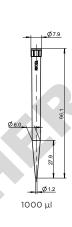


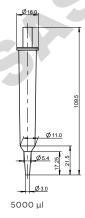












PURITY LEVELS AND STERILITY

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 -> 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 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.

### **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):		Big Box (1000 μL tips):		5er nest (10, 350 μL tips):		5 mL Tip Box:	
	Height with lid	68.2 mm	Height with lid	109.2 mm	Height with lid	152.8 mm	Height with lid	126 mm
	Height without lid	65.4 mm	Height without lid	106.1 mm	Height without lid (tips)	149.6 mm	Height without lid	150 mm

General information about the LiHa disposable tips can be found on the Tecan homepage www.tecan.com

# Contact your nearest Tecan office or visit www.tecan.com/consumables

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