

# LiHa Disposable Tips.

## SPECIFICATIONS

### 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
<b>Contents per Sales Unit</b>	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
<b>Lot number</b>	Fully traceable to year, week and day.		

#### PRODUCTS 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

##### 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

<b>Description</b>	Conductive pipette tips for automation		
<b>Material</b>	<b>Tip</b> Polypropylene (PP), black	<b>Filter</b> Polyethylene (PE), white	<b>Tray</b> Polycarbonate (PC) with color coding

#### PIPETTING PERFORMANCE

Pipetting performance are for Freedom EVO® and for Fluent®

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	0.35 mm	0.5-10 µl*	< 6% at 0.5 µl < 4% at 1.0 µl < 1% at 10 µl	< 5% at 0.5 µl < 0.8% at 10 µl
50 µl	58.0 mm	0.36 mm	0.5-50 µl*	< 4% at 1.0 µl < 1.0% at 5 µl < 0.4% at 50 µl	< 4% at 1.0 µl < 0.5% at 10 µl < 0.3% at 50 µl
200 µl	58.5 mm	0.50 mm	3.0-200 µl*	< 1.5% at 10 µl < 0.2% at 200 µl	< 0.6% at 10 µl < 0.4% at 200 µl
350 µl	58.3 mm	0.48 mm	3.0-350 µl	≤ 1.5% at 5 µl ≤ 0.5% at 100 µl ≤ 0.5% at 350 µl	< 0.6% at 10 µl < 0.2% at 200 µl
1000 µl	96.1 mm	0.80 mm	25-1000 µl*	< 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
5000 µl	109.5 mm	1.50 mm	300-4850 µl*	≤ 2.5% at 300 µl ≤ 0.5% at 4500 µl	

Test criteria available upon request. \*Highest volume achievable due to filter is 4800 µl

## PURITY LEVELS AND STERILITY

Purity level	Tecan Pure	Tecan Sterile
	Free from human DNA, DNase, RNase and PCR inhibitors	Free from human DNA, DNase, RNase, pyrogens and endotoxins
<b>Sterilization</b>	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

<b>Transport conditions</b>	<b>Temperature</b> -25°C / +55°C	<b>Humidity</b> 10-95%	
<b>Storage conditions</b>	Product must be stored at room temperature, dry and protected from direct solar radiation.		
<b>Chemical resistance</b>	See Operating Manual Freedom EVO (Doc no. 392886), Chapter 3.7.1 Standard Material Resistance Table.		
<b>Shelf life</b>	<b>Tecan Standard</b> 5 years (after production)	<b>Tecan Pure</b> 5 years (after production)	<b>Tecan Sterile</b> 4 years (after production)
<b>Autoclavability</b>	Not permitted		

## LIQUID HANDLING DEVICES

<b>Compatible</b>	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

General information about the LiHa disposable tips can be found on the Tecan homepage: [www.tecan.com/consumables](http://www.tecan.com/consumables)

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

.....  
**Australia** +61 3 9647 4100 **Austria** +43 62 46 89 33 **Belgium** +32 15 42 13 19 **China** +86 21 220 63 206 **Denmark** +45 70 23 44 50 **France** +33 4 72 76 04 80  
**Germany** +49 79 51 94 170 **Italy** +39 02 92 44 790 **Japan** +81 44 556 73 11 **Netherlands** +31 18 34 48 17 4 **Singapore** +65 644 41 886 **Spain** +34 93 490 01 74  
**Sweden** +46 8 750 39 40 **Switzerland** +41 44 922 89 22 **UK** +44 118 9300 300 **USA** +1 919 361 5200 **Other countries** +43 62 46 89 33  
.....

Tecan Group Ltd. makes every effort to include accurate and up-to-date information within this publication; however, it is possible that omissions or errors might have occurred. Tecan Group Ltd. cannot, therefore, make any representations or warranties, expressed or implied, as to the accuracy or completeness of the information provided in this publication. Changes in this publication can be made at any time without notice. All mentioned trademarks are protected by law. For technical details and detailed procedures of the specifications provided in this document please contact your Tecan representative. This brochure may contain reference to applications and products which are not available in all markets. Please check with your local sales representative.

All mentioned trademarks are protected by law. In general, the trademarks and designs referenced herein are trademarks, or registered trademarks, of Tecan Group Ltd., Männedorf, Switzerland. A complete list may be found at [www.tecan.com/trademarks](http://www.tecan.com/trademarks). Product names and company names that are not contained in the list but are noted herein may be the trademarks of their respective owners.

© 2016, Tecan Trading AG, Switzerland, all rights reserved. For disclaimer and trademarks please visit [www.tecan.com](http://www.tecan.com)

[www.tecan.com](http://www.tecan.com)

 **TECAN.**

