#### MiraSWAB®

### cleaning critical surfaces

## Description

MiraSWAB® 1500 and 1600 Series Swabs feature a patent-pending micro fiber fabric over foam tip bonded to a polypropylene shaft resulting in a swab that is soft, conformable to work surfaces yet both resistant to abrasion and solvents. MiraSWABS® for the first time offer the cleaning performance of micro fiber fabrics with the scratch free properties of foam for Optics, HDD, Semiconductor and Biomedical applications.

The MiraSWAB® 1600 Series employs a static dissipative handle for ESD sensitive applications.

#### Common Characteristics and Benefits



Fabric over foam construction compatible with aggressive solvents such as acetone, Kyzen and MEK



Super soft foam core enables the swabs to conform to articulated surfaces for good cleaning efficiency.



Micro fiber fabric enables excellent removal of difficult to remove stains and particles.



Proprietary cleaning process ensures low extractable for streak free cleaning.



## **Applications**

- Cleaning stains and particles from scratch sensitive optics and optical assemblies
- Cleaning applications that require acetone, MEK, NMP and Kyzen
- Cleaning blind surfaces such as O-ring grooves and ink jet print heads
- Replacing Cotton and Chamois swabs in applications requiring cotton like absorbency but without the fibers
- Removing excess materials in fine assembly operations

# **Physical Properties**

Tip/Outer MiraWIPE® Micro Fiber Clean Room Fabric Tip/Inner 100PPI Ester Based Polyurethane Foam

Tip Bond Thermal-Ultrasonic

Handle Polypropylene and ESD Safe Polypropylene

# Swab Models

Measured in Millimeters. ± 0.02



Product Name	HT1500FC	HT1501FC	HT1502FC	HT1511FC	HT1550C	HT1602FC	HT1629FC	HT1630C	HT1630FC	HT1650FC
Head Material	MiraWIPE®									
Head Thickness	4.9	3.3	2.7	3.3	2.2	2.7	2.3	1.5	2.0	2.3
Head Width	10.7	5.9	3.9	5.9	2.3	3.9	3.7	3.3	3.3	2.4
Head Length	21.8	17.8	10.4	17.8	10.5	10.4	10.8	10.3	10.3	10.5
Handle Material	Polypropylene					Polypropylene with Permanent ESD Additive				
Handle Diamete <b>r</b>	2.9	2.9	2.5	2.9	2.5	2.5	2.5	2.5	2.5	2.5
Handle Length	120.0	133.7	58.9	76.7	58.1	59.1	58.1	59.2	59.2	57.9
Total length	141.8	151.5	69.3	94.5	68.6	69.5	68.9	69.5	69.5	68.4
Head Bond	Thermal									
Handle Color	Blue					White				
Description	Oval Tip	Flexible, Oval Tip	Flexible Tip	Flexible Oval Tip	Pointed Tip	Flexible Tip	Flexible Paddle Tip	Flexible Paddle Tip	Flexible Paddle Tip	Pointed Tip

# Cleanliness

**Particles** (via LPC  $> .5\mu$ m) <10k per swab

NVR (mg/swab)

DI H2O <.15 **IPA** <.40 Ionics (Via IC in Micrograms per swab)

Chloride <.9 Sulfate <.4 Sodium <.7 Fluoride <.4 **Nitrate** <.2 Magnesium <.2

Free of Silicone/Amide

# ESD Performance

Dissipation: 1000 volts to 10 volts in less than 1 second at 50% RH

Volume Resistivity:1900 Static Dissipative Swabs - Handle - 108