

# Shiny Glass Cloths

Smooth texture of the glass cloth easily releases particles with rinsing. This cloth also reduces the amount of chemicals needed for cleaning. Studies by the EPA have found that microfiber cloths eliminated 94% of bacteria from surfaces (compared to the 68% reduction by regular mops.) Using Monarch Brands color coding system eliminates any guesswork from what product should be used when. Which means microfiber that is used to clean guestroom toilets will never be used to clean vanities. Our microfiber cloths are lint-free and can be laundered up to 500 times.



## Details

Part Number	GSM	Grams/Piece	Color	Size/Inches	Case Count
M915160B	20	44	Blue	16 x 16	15 Dozen/Case
M915160GLD	20	44	Gold	16 x 16	15 Dozen/Case
M915160GRY	20	44	Grey	16 x 16	15 Dozen/Case

## Technical Specifications

Pass Acceptable Fail

### Size Tolerance

L +/- 1%



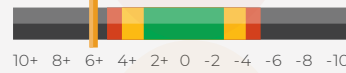
### Weight Tolerance

+/- 1%



### Dimensional Stability to Washing - MD

6%



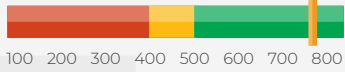
### Dimensional Stability to Washing - CD

2%



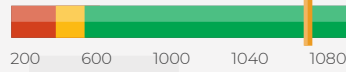
### Breaking Strength

length 790 N



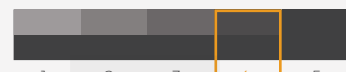
### Breaking Strength

width 1070 N



### Color Shade

4



### Color Fastness to Washing

2-3



### Color Fastness to Rubbing

3



### Color Shade Variation after 5 washes

4



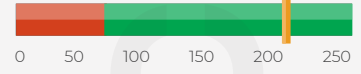
### Elongation - MD

127.00%



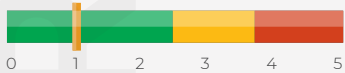
### Elongation - CD

212.00%



### Absorption Speed

1s



### Total Absorption

162%



# The standards that we are measured by are globally-recognized. The standards that we hold ourselves to are higher.

## Size & Weight Tolerance

Since microfiber cloths are woven products, there will be a variation in size and weight when coming off the loom. We use QIMA to measure our towels against industry-standard tolerance levels.

## Dimensional Stability to Washing

The GB/T- 8630-2013 standard This standard was developed by the China National Textile and Apparel Council. It specifies a method to determine the dimensional change of textiles after washing and drying. This standard is applicable to textile fabrics, clothing, and other textile products and measures shrinkage after five washes.

## Absorption

GB/T 22799-2009 tests the absorbency water into a fabric. GB/T 22799-2009 also tests the initial absorption speed of a fabric. Speed and weight work together to produce a deeper understanding of the fabric's ability to absorb. To pass Absorption Speed a 5"x5" square of fabric must be completely saturated in under five seconds. Total Absorbency is the amount of water absorbed into the fabric at the end of that five seconds.

Buyer beware! Many manufacturers use fabric softener to make their towels seem softer. This reduces the absorbency rate of a towel. Water beads on the surface as the softener clogs the fabric with an impermeable chemical.

## Color Shade Standard AATCC

The color change scale consists of nine pairs of grey colored chips, from grades 1 to 5 (with four half steps). Specimens of a given hue match against grey chips. They equate differences in lightness with differences in color. One sample is a control, the other is washed. Grade 5 represents no change, and grade 1 depicts a severe change in some standards.

## Color Fastness to Rubbing – “Dry Crocking”

Dry Crocking is done using AATCC<sup>®</sup> Crock Meter that rubs a dry piece of sample against a white fabric for a specific time. Then the white piece of fabric was measured against AATCC<sup>®</sup> Grayscale for staining to see how much color was migrated.

## Color Fastness to Washing – “Wet Crocking”

Dry Crocking is done using AATCC<sup>®</sup> Crock Meter that rubs a wet piece of sample against a white fabric for a specific time. Then the white piece of fabric was measured against AATCC<sup>®</sup> Grayscale for staining to see how much color was migrated.

## Breaking Strength

Fabric breaking strength is also can be called tensile strength, which refers to as the maximum tensile force when the specimen is stretched to break. It is one of the main standards to assess the intrinsic quality of textiles. The unit of fabric breaking strength is “Newton (N)” and it is used to evaluate the capability of the fabric to resist to tensile damage. Microfiber is tested two ways: Machine Direction (MD) is the length of the microfiber roll. Cross Direction is the defined width of the fabric (typically much shorter).

## Elongation

Microfiber fabric is stretchable. Elongation is how much you can stretch it without breaking or tearing the fabric against the original size. The stretched portion of the fabric is converted into a percentage, with 50% being the minimum. Microfiber is tested two ways: Machine Direction (MD) is the length of the microfiber roll. Cross Direction is the defined width of the fabric (typically much shorter).



# Q I M A<sup>®</sup>

### QC Tailored for the Textiles Industry

Modern textile manufacturers employ progressively more sophisticated methods and use a variety of natural, man-made, and synthetic fibers. The quality and durability of fabrics are directly affected by the quality of fibers, correct choice of dyes and colorants, and the use of appropriate manufacturing processes. QIMA offers inspections and laboratory tests for all modern textiles.



**AATCC—the American Association of Textile Chemists and Colorists**—provides test method development, quality control materials, educational development, and networking for textile and apparel professionals throughout the world.

AATCC<sup>®</sup>: AATCC Gray Scale for Color Change

AATCC<sup>®</sup>: AATCC Gray Scale for Staining

AATCC<sup>®</sup>: AATCC - 9 Step Chromatic Transference Scale

20 AATCC AFU: After 20 Fading (Hours) Units



### GuoBiao Chinese National Standards

GB/T standards are the China national standards, also called as Guobiao Standards. China GB/T standards are classified as two stages, Mandatory or Recommended. Mandatory standards have the force of law as do other technical regulations in China. They are enforced by laws and administrative regulations and concern the protection of human health, personal property and safety.