



## Single Use Microfiber Tools

Maintaining a clean, safe and healthy environment is critical to both staff members and guests. Impact provides the proper tools to ensure the highest standard of clean in any facility.

**Impact**<sup>®</sup>  
Everything.

# 3 Key Benefits of a Disposable Cleaning Program

## 1. Reduce Cross Contamination

Re-using a mop that has been used to clean one area can lead to the spread micro-organisms. Even utilizing freshly laundered mops in each area, does not eliminate the risk of cross-contamination. Studies have shown “laundered” textiles have tested positive for microorganisms. 93% of laundered mops contain dangerous levels of bacteria after washing\* Using a new, fresh single use Microfiber mop in each cleaning area significantly reduces the risk of cross-contamination.

## 2. Improved level of Disinfecting

Cotton and laundered Microfiber can interfere with the efficacy of many disinfectants. This phenomena is often referred to as “Quat Binding”. In fact one study found that the level of a disinfectant remaining on a cotton cloth placed in a solution-filled pail was decreased by 50 percent after soaking for just 10 minutes\*\* Impact’s Single Use Microfiber floor pads are compatible with all sanitizers and will not bind with the active ingredients impairing their efficacy.

## 3. Improved level of Clean

Optimal soil removal, Microbe removal, and coverage ensure the highest level of cleaning is achieved within the facility.

### Soil removal

Impacts Single Use Microfiber floor pads remove up to 23% more foot traffic soil from flooring surfaces compared to leading competitive disposable floor pads.

### Microbe removal

Impacts’ Single Use Microfiber floor pads achieve a 99.9999% microbe removal. (6 log 10).

### Surface coverage

Impact’s Single Use Microfiber floor pads absorb 9.8 times its weight and exhibits excellent release properties. This ensures proper dwell time when utilizing disinfectants to clean the floors.



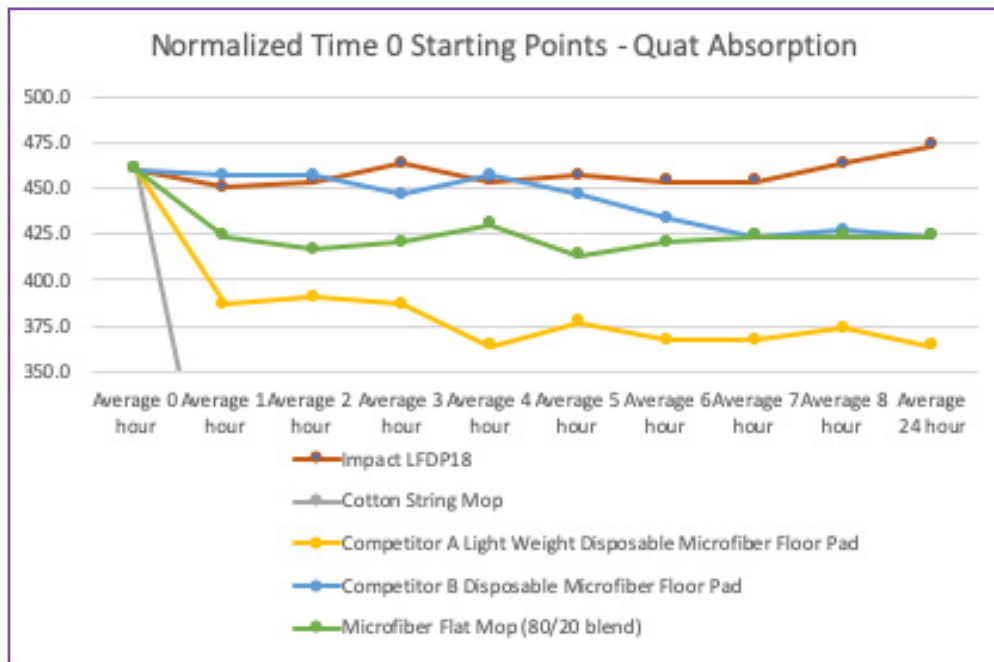
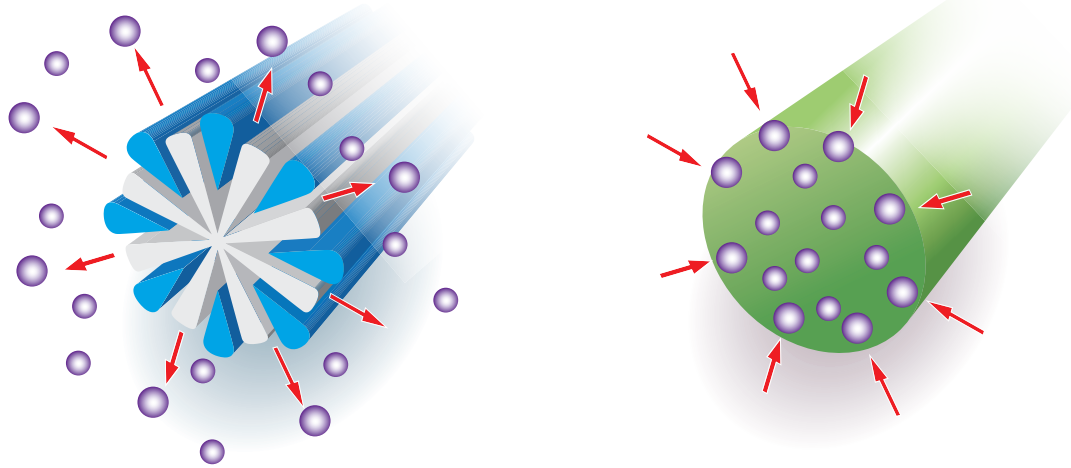
\*Charles Gerba, Ph.D., Laure Sifuentes, PhD., Kathleen Engelbrecht, MA, David Koeng, Ph D., Ilona Weart, BS, Microbial Contamination of Hospital Reusable Cleaning Towels, March 25, 2013.

\*\* [www.cleanlink.com/hs/article/What-Is-Quat-Binding-And-Why-It-Must-Be-Prevented\\_2/23/16](http://www.cleanlink.com/hs/article/What-Is-Quat-Binding-And-Why-It-Must-Be-Prevented_2/23/16)

# Definition of Quat Binding

The phenomenon of quat binding occurs when the active ingredients in many disinfectant (quaternary ammonium chloride) becomes attracted and absorbed into fabrics. Quats are positively charged ions and cotton and other natural textiles are negatively charged. These opposites attract; not allowing the active ingredients in the disinfectants to be released on to the floor. The result is an inadequately disinfected flooring surface.

Inadequate laundering and cleaning procedures of synthetic materials can also negate or change the charge of the textile over a period of time, which can lead to quat binding



## Test Methodology

1. A quat-based hard surface sanitizer was made using an industry standard use-solution.
2. Each cloth tested was fully immersed in its own container of diluted sanitizer.
3. The initial quat concentration was measured using a LaMotte QUAT test kit.
4. After each hour from time 0 through 8 hours, the cloth was removed and the solution tested.
5. After testing, the cloth was returned to the original container.
6. Similarly the solution was also tested at 24 hours.
7. Each time point was tested in triplicate and the average reported.

Impact's LFDP18 Single Use Microfiber floor pad will NOT degrade in sanitation chemicals unlike competing pads. Most of the competing floor pads dropped within the first hour while one competing pad started to degrade at 4 hours (a concern for customers who allow floor pads to dwell/charge).

# Overall Finding

Impact's LFDP18 single-use floor pad achieved at least a 6 log<sub>10</sub> reduction (99.9999%) of 4 challenged microorganisms including *Staphylococcus aureus* ATCC 6538, *Pseudomonas aeruginosa* ATCC 9027, *Enterococcus hirae* ATCC 10541, and *Candida albicans* ATCC 10231. The substrate was VCT (vinyl composition tile) coated with polyurethane (PUR) coating to simulate multiple real-world applications and environments.

## Detailed Results: LFDP18 – Single Use Microfiber Floor Pad

Development Style DZ3491T1, 190 GSM Floor Pad			
Test organism	<i>Staphylococcus aureus</i> ATCC 6538		
Test surface	VT with PUR coating		
Post cleaning tile bioburden count			
TF 1 Replicate 1	250	*CFU/surface	
TF1 Replicate 2	10	*CFU/surface	
TF 1 Replicate 3	10	*CFU/surface	
Average	90	*CFU/surface	
Initial Inoculum Count	2.8 x 10 <sup>8</sup>	*CFU/surface	
Percent Reduction from initial inoculum	99.9999	%	
Log <sub>10</sub> Reduction	6.49		
Test field 2- 4 average	<1	*CFU/surfaces	
Replicate passes criteria of test method			

Development Style DZ3491T1, 190 GSM Floor Pad			
Test organism	<i>Enterococcus hirae</i> ATCC 10541		
Test surface	VT with PUR coating		
Post cleaning tile bioburden count			
TF 1 Replicate 1	10	*CFU/surface	
TF1 Replicate 2	0	*CFU/surface	
TF 1 Replicate 3	0	*CFU/surface	
Average	10	*CFU/surface	
Initial Inoculum Count	2.5 x 10 <sup>8</sup>	*CFU/surface	
Percent Reduction from initial inoculum	99.99999	%	
Log <sub>10</sub> Reduction	7.40		
Test field 2- 4 average	0	*CFU/surfaces	
Replicate passes criteria of test method			

Development Style DZ3491T1, 190 GSM Floor Pad			
Test organism	<i>Pseudomonas aeruginosa</i> ATCC 15442		
Test surface	VT with PUR coating		
Post cleaning tile bioburden count			
TF 1 Replicate 1	20	*CFU/surface	
TF1 Replicate 2	0	*CFU/surface	
TF 1 Replicate 3	10	*CFU/surface	
Average	10	*CFU/surface	
Initial Inoculum Count	2.5 x 10 <sup>8</sup>	*CFU/surface	
Percent Reduction from initial inoculum	99.99999	%	
Log <sub>10</sub> Reduction	7.40		
Test field 2- 4 average	0	*CFU/surfaces	
Replicate passes criteria of test method			

Development Style DZ3491T1, 190 GSM Floor Pad			
Test organism	<i>Candida albicans</i> ATCC 10231		
Test surface	VT with PUR coating		
Post cleaning tile bioburden count			
TF 1 Replicate 1	0	*CFU/surface	
TF1 Replicate 2	0	*CFU/surface	
TF 1 Replicate 3	0	*CFU/surface	
Average	0	*CFU/surface	
Initial Inoculum Count	5 x 10 <sup>6</sup>	*CFU/surface	
Percent Reduction from initial inoculum	99.9999	%	
Log <sub>10</sub> Reduction	>6		
Test field 2- 4 average	0	*CFU/surfaces	
Replicate passes criteria of test method			

## Test Methodology

### Test Article

Impact's LFDP18 single-use floor pad.

### Standard

DIN EN 16615:2014 – Modified. Quantitative test method for the evaluation of bactericidal and yeasticidal activity on no-porous surfaces with mechanical action employing wipes in the mechanical area 4 field test.

### Article Prep

Samples were processed into 3 x 5 in. (7.6 x 12.7 cm). Immediately prior to testing each test article was dampened with sterile deionized water, and manually wrung.

### Test System Prep

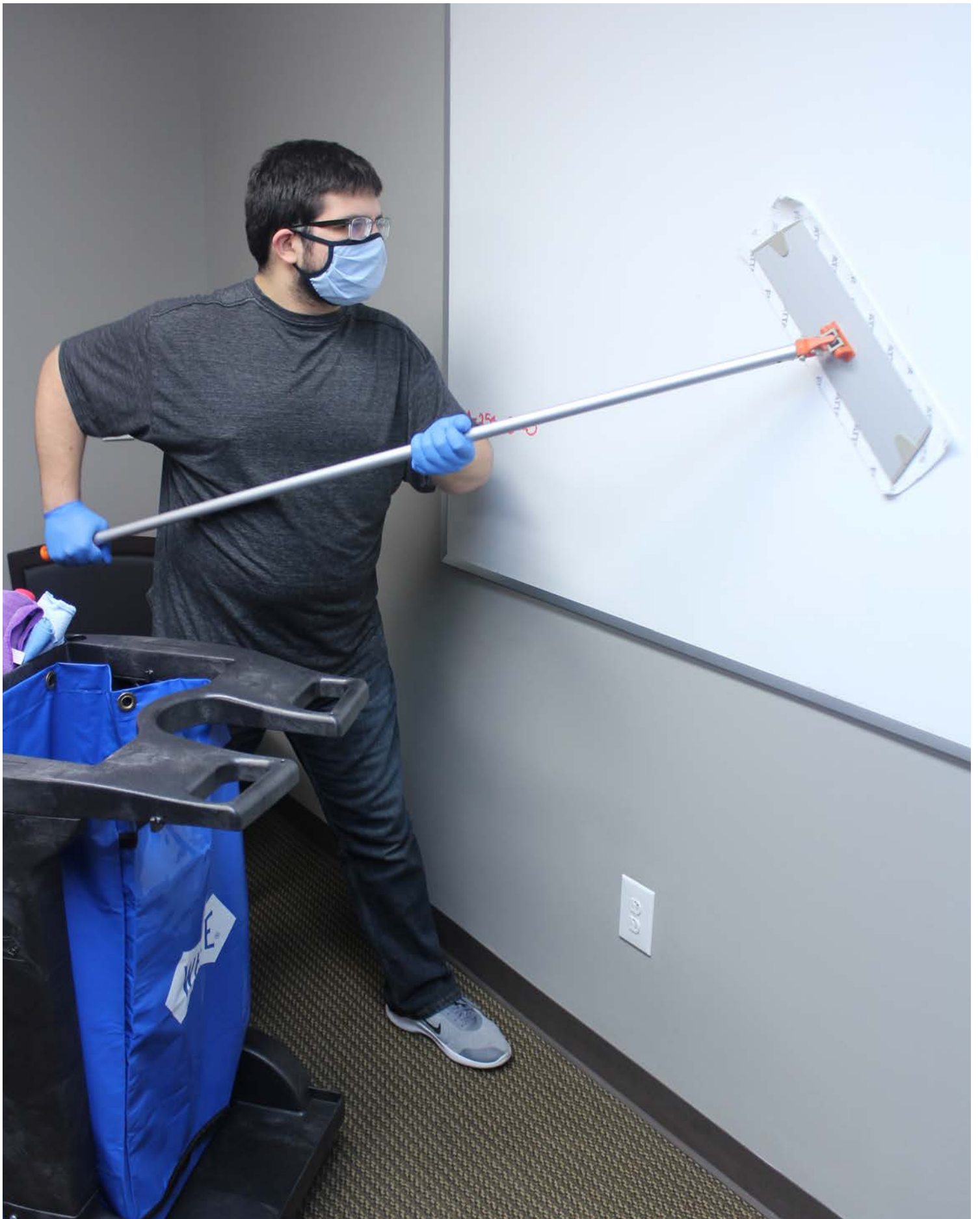
A suspension of indicated microorganisms was prepared with Sterile water and calibrated using a photo spectrometer. Bacterial suspensions were diluted to 0.67 – 0.7 OD and Yeast suspensions were diluted to 0.14 - 0.17 OD. Each VCT and glass surface was washed in hot soapy water, rinsed with tap water, followed by rinsing with deionized water. Prior to testing, the tiles were sanitized with 70% isopropyl alcohol and allowed to dry.

### Application

Test field 1 of the test surface was inoculated with 50 ul of the prepared inoculum and left to dry at 25°C. Following the drying period, the moistened test article was used to wipe the tile starting in test field 1 and moving through test field 4. The wiping apparatus was then rotated 180 degrees, and then used to wipe from test field 4 through test field 1. Every individual test field was then extracted utilizing a sterile sponge in a solution of sterile water. Aerobic plate counts were set up utilizing standard methods agar spread plate method.

### Exposure Conditions

The inoculated plates were inverted and incubated under conditions favorable for growth: 30- 35°C for 24-48 hours in aerobic conditions.



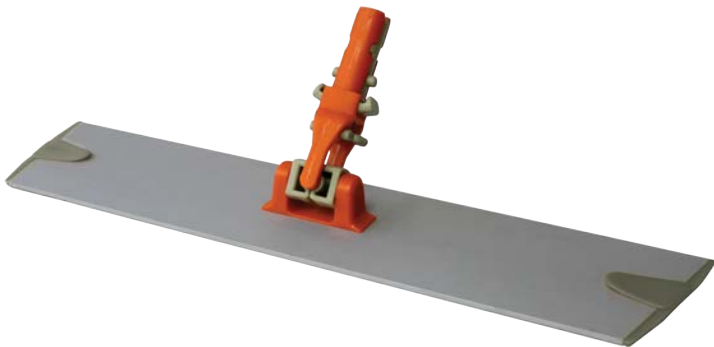
# Impact Products Microfiber Cleaning Tools

## Single use microfiber flat mop LFDP18



Single-Use in critical areas where cross-contamination prevention is paramount.

Impact's LFDP18 is a 100% synthetic, non-chemically split microfiber mop. LFDP18 effectively removes soil, organic material and microbes from the floor surface. By utilizing a new pad for each cleaning application, the risk of cross-contamination is mitigated. Unlike cotton products and other laundered synthetic textiles, LFDP18 will not "quat-bind". The optimal absorption and release properties on the LFDP18 provide effective and uniform coverage for cleaning and/or disinfecting. LFDP can be either pre-charged or charged as used with disinfectant/cleaner.

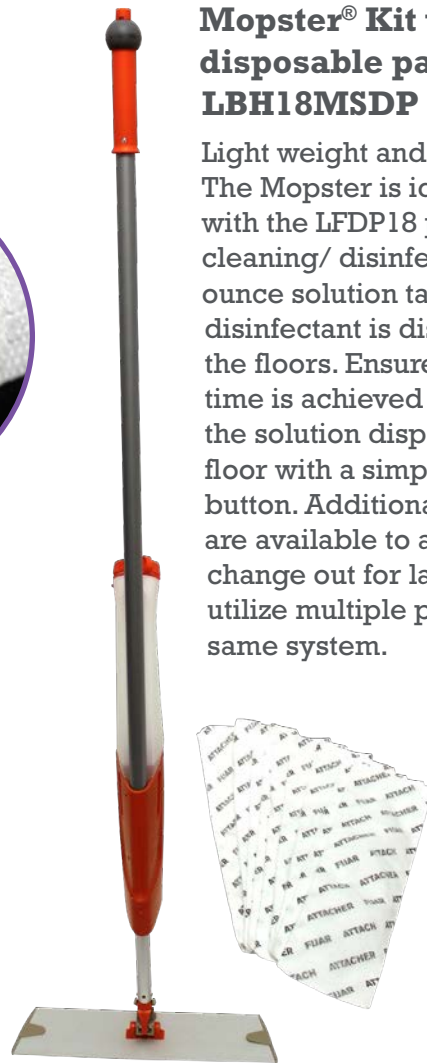


## Standard Velcro® holder for single use mop heads LFMS18

Designed to work with disposable microfiber products, this holder incorporates less aggressive teeth to release the product for easier change outs. Swivel head for easy maneuverability when cleaning floors. Also has a locking feature that allow for ease of use when cleaning vertical surfaces.

## Mopster® Kit with disposable pads LBH18MSDP

Light weight and easy to use. The Mopster is ideal for use with the LFDP18 pads for quick cleaning/ disinfecting. The 32 ounce solution tank assured fresh disinfectant is dispensed onto the floors. Ensure proper dwell time is achieved by increasing the solution dispensed on the floor with a simple push of a button. Additional solution tanks are available to allow for quick change out for larger areas or utilize multiple products with the same system.



## Mopster Pro-Pak LBH18BPK

This backpack system is designed to go with Impact's Mopster for the improved efficiencies for cleaning larger areas. The backpack utilized a refillable 1.5 gallon cleaning solution bag offering four times the cleaning solution versus the standard Mopster refill tank. This system is designed with user comfort in mind. The backpack evenly distributes the weight and includes padded shoulder straps.



## Microfiber top down charging bucket with strainer

**LF228**

Can be used to either charge LFDP18 mops for press and go applications. The compact design fits on most maids carts and microfiber cleaning trolleys.



## 54" aluminum handle for microfiber frames

**CHO246**



## 40 - 71" aluminum extension handle for microfiber bases

**LFSO100**



## Additional single use cleaning tools

### Hy-Sorb disposable mops

**S380SM, S380MD, S380LG**

These highly absorbent mops are perfect for picking up spills or cleaning heavily soiled areas prior to disinfecting.

- Certified Incinerable
- Mop goes from bag to the bucket with no break-in period



### Duralon Bowl mop with red handle

**207**



These effective bowl mops can be utilized as a single use application in areas where there is high contamination risk.

- Bright Red handle is a visible indicator that this cleaning tool designated for high risk areas.
- Polypropylene mop strands are acid resistant



**84 - Fiberglass 64" janitor quick change orange mop handle**



**impact**  
Everything.

2840 Centennial Road  
Toledo, Ohio 43617-1831

Phone: 419.841.2891  
Toll Free: 800.333.1541  
Fax: 800.333.1531

[impact-products.com](http://impact-products.com)

© 2020 Impact Products, LLC

DISP2002