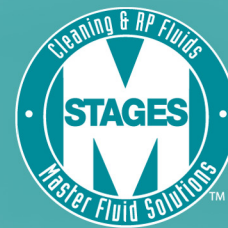


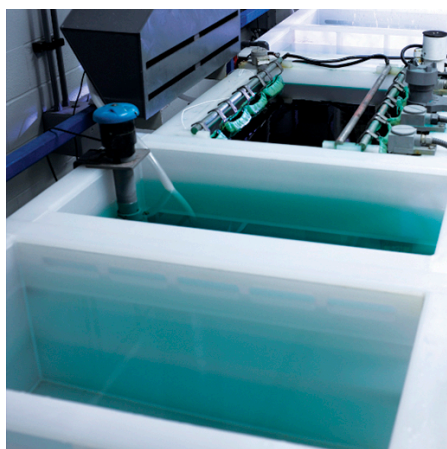
# Master STAGES™ CLEAN 2017

## Economical Heavy-duty Spray Cleaner



Master STAGES™ CLEAN 2017 is an economical heavy-duty spray cleaner that removes heavy soils and oily residues from ferrous and magnesium parts. Often used in rebuild operations and for cleaning up cast iron, stamped or drawn steel parts, or removing heavy RP coatings.

### Immersion



*Immersion washers effectively remove residue from light to heavy soils, light rust, coolant, oil, drawing compounds, lubricants, waxy soil, and corrosion inhibitors. Designed for cleaning aluminum, steels, cast iron, stainless steels, alloys, brass, bronze, copper, and magnesium and for multiple-metal situations, Master STAGES highly-concentrated cleaners allow immersion washers to run at lower concentrations and lower temperatures with increased bath life, less foam, and added corrosion protection.*

*Environmentally friendly, and free of SARA 313 reportable ingredients, cost-effective Master STAGES immersion cleaners ensure exceptional parts cleaning while using less product and less energy — for a better bottom line.*

### Choose CLEAN 2017:

- Very economical way to remove heavy soils and light rust
- Low foaming at ambient temperatures, and even lower when used above 120°F (49°C)
- Can be recycled using XYBEX equipment
- Contains no solvents, borates, silicates, nitrites, or amines
- Long bath life
- Excellent compatibility with magnesium
- Will prevent flash rusting and provide one-to-two days of in-process corrosion inhibition if not rinsed

### CLEAN 2017 especially for:

**Applications** — corrosion inhibition and parts washing

**Soils** — coolant residues, greases, oils, sulfurized oils, and waxes

**Metals** — cast iron, copper, magnesium, stainless steels, steels, and titanium

**Industries** — automotive, bearing, firearms, general engineering, general fabrication, general industry, job shop, machine tool, medical, and tool

**CLEAN 2017 is free of** — amines, borates, nitrites, silicates, and solvents

# Master STAGES™ CLEAN 2017

## Economical Heavy-duty Spray Cleaner



### Application Guidelines

- CLEAN 2017 is normally used at concentrations from 1%-7%. We recommend 3% as a starting concentration to provide reserve surfactant.
- This product is suitable only for steel, stainless steel, cast iron, titanium, pure copper, and magnesium parts. Do not use on aluminum alloy, copper alloy, or zinc.
- Operating temperature should be between 70°F to 210°F (21°C to 99°C) for spray cleaning.
- CLEAN 2017 will work well in immersion washers as well as ultrasonic baths under 120°F (49°C).
- High pH cleaners such as CLEAN 2017 often produce "soaps" as part of their cleaning action. CLEAN B1 is effective at reducing foam resulting from the formation of these soaps and may be used in conjunction with CLEAN 2017.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at <https://www.masterfluids.com/na/en-us/distributors/index.php>, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

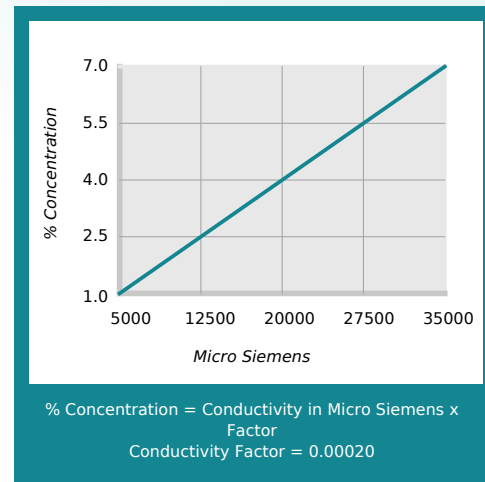
### Physical Properties Typical Data

|   |                 |
|---|-----------------|
| Color (Concentrate)                           | Light yellow    |
| Color (Working Solution)                      | Light yellow    |
| Odor (Concentrate)                            | Mild, detergent |
| Form (Concentrate)                            | Liquid          |
| Flash Point (Concentrate) (ASTM D92-90)       | > 212°F         |
| pH (Concentrate as Range)                     | 13.5 - 14.0     |
| pH (Typical Operating as Range)               | 12.5 - 13.0     |
| V.O.C. Content (EPA Method 24)                | 0 lbs/gal       |
| Cleaner Conductivity Factor                   | 0.00020         |
| Titration Factor (CL-1 Titration Kit)         | 0.36            |
| Number of Cleaner Vials (CL-1 Titration Kit)  | 1.0             |
| Cleaner Indicator A or B (CL-1 Titration Kit) | A               |

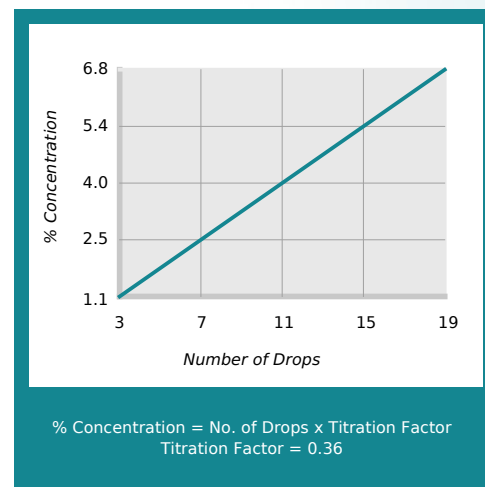
### Recommended Metalworking Concentrations

|                            |             |
|----------------------------|-------------|
| Design Concentration Range | 1.0% - 7.0% |
|----------------------------|-------------|

### Concentration by Conductivity



### Concentration by Titration



### Health and Safety

Request SDS



# Master STAGES™ CLEAN 2017

## Economical Heavy-duty Spray Cleaner



### Mixing Instructions

- Recommended usage concentration in water: 1.0% - 7.0%.
- To help ensure the best possible working solution, add the required amount of concentrate to the required amount of water (never the reverse) and stir until uniformly mixed.



1-gallon jug  
SKU: CL2017-1G  
UPC-12: 641238041351



5-gallon pail  
SKU: CL2017-5G  
UPC-12: 641238041412



54-gallon drum  
SKU: CL2017-54G  
UPC-12: 641238041405



270-gallon tote  
SKU: CL2017-270G  
UPC-12: 641238041382

### Additional Information

- Industrial use only
- Consult Master Fluid Solutions before using on any metals or applications not specifically recommended.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as recommended by Master Fluid Solutions, as this may reduce overall performance, result in adverse health effects, or damage the machine tool and parts. If contamination occurs, please contact Master Fluid Solutions for recommended action.
- Master STAGES™ is a trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
- The information herein is given in good faith and believed current as of the date of publication and should apply to the current formula version. Because conditions of use are beyond our control, no guarantee, representation, or warranty expressed or implied is made. Consult Master Fluid Solutions for further information. For the most recent version of this document, please go to this URL:

[https://2trim.us/di/?i=na\\_en-us\\_CLEAN2017](https://2trim.us/di/?i=na_en-us_CLEAN2017)



501 West Boundary Street  
Perrysburg, OH 43551-1200  
United States  
+1 419-874-7902

[info@masterfluids.com](mailto:info@masterfluids.com)

[masterfluids.com/na/en-us/](https://masterfluids.com/na/en-us/)