Master STAGES™ CLEAN 2029 "One Step" is a highly concentrated cleaner/corrosion inhibitor designed for spray washers and immersion tanks. This product will remove heavy soils and provide two-to-four weeks of indoor corrosion inhibition on steel and cast iron parts.

**Cleaners+RP**

**A case for CLEAN 2029:**
A manufacturer of automotive clutch components running two brands of washing/corrosion inhibitors in their 30 high-pressure spray washers wanted to improve RP. CLEAN 2029 was tested against the other two cleaners with astounding results. CLEAN 2029 corrosion protection lasted eight times longer than one and 24 times longer than the other product!

They have been very satisfied with CLEAN 2029 and they've doubled their bath life, thereby reducing downtime, and have no corrosion issues, while reducing RO water usage, waste-water generation, inventory, and costs!

**Improve protection and production with CLEAN 2029.**

Choose CLEAN 2029 "One Step":
- Formulated without silicates or other high pH additives, CLEAN 2029 "One Step" is compatible with ultrafiltration systems and bioremediation
- An excellent choice for cabinet-style spray washers and can be used for washing steel, stainless, cast iron, titanium, and many aluminum alloys
- Hard water tolerant, it provides long bath life
- Environmental approvals are simplified because CLEAN 2029 "One Step" contains no nitrites, barium, phenols, or butyl cellosolve
- This formula has very low V.O.C. content and no SARA 313 reportable ingredients
- Low foaming for use in high-pressure spray washers with temperatures above 140°F (60°C)

**CLEAN 2029 "One Step" especially for:**
- **Applications** — corrosion inhibition, dip, dunk, immersion tanks, parts washing, and spray
- **Soils** — coolant residues, oils, and sulfurized oils
- **Metals** — cast iron, stainless steels, steels, and titanium
- **Industries** — automotive

**CLEAN 2029 "One Step" is free of** — 2-butoxyethanol (Butyl), barium, high pH additives, nitrites, phenols, SARA 313 listed ingredients, and silicates
Application Guidelines

- CLEAN 2029 "One-Step" is designed to be used at low concentrations:

<table>
<thead>
<tr>
<th>Washer Type</th>
<th>Percent</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray washer - light soils</td>
<td>3.0%</td>
<td>(33:1)</td>
</tr>
<tr>
<td>Spray washer - heavy soils</td>
<td>5.0%</td>
<td>(20:1)</td>
</tr>
<tr>
<td>Immersion washer</td>
<td>5.0%-10.0%</td>
<td>(20:1-10:1)</td>
</tr>
<tr>
<td>Ultrasonic washer</td>
<td>3.0%-7.0%</td>
<td>(33:1-13:1)</td>
</tr>
</tbody>
</table>

- This product should be heated above 140°F in spray applications to avoid foaming. Ultrasonic or agitated immersion washers can often run at room temperature. The temperature limit for this product is 180°F, unless otherwise advised by your Master Fluid Solutions representative.

- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.2trim.us/distributors.php, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

Physical Properties Typical Data

- Color (Concentrate): Yellow
- Color (Working Solution): Cloudy white
- Odor (Concentrate): Mild
- Form (Concentrate): Liquid
- Flash Point (Concentrate) (ASTM D93-08): > 216°F
- pH (Concentrate as Range): 11.3 - 11.7
- pH (Typical Operating as Range): 10.0 - 11.5
- Coolant Refractometer Factor: 5.5
- V.O.C. Content (EPA Method 24): 0 lbs/gal
- Cleaner Conductivity Factor: 0.00095
- Titration Factor (CL-1 Titration Kit): 1.00
- Number of Cleaner Vials (CL-1 Titration Kit): 2
- Cleaner Indicator A or B (CL-1 Titration Kit): A

Recommended Metalworking Concentrations

Design Concentration Range: 3.0% - 10.0%
CLEAN 2029 "One Step"

Parts Washing Fluid with Corrosion Inhibitor

Mixing Instructions
- Recommended usage concentration in water: 3.0% - 10.0%.
- 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.

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/?plr=CLEAN2029*en-us*na