



Master STAGES™ CLEAN 2023 "Big Al"

Washing Fluid for Aluminum and Multi-metal Parts

GENERAL DESCRIPTION

Master STAGES™ CLEAN 2023 "Big Al" is a highly-concentrated liquid, parts-washing compound/corrosion inhibitor for use in spray washers. This product is safe and effective on aluminum alloy and steel alloy parts, as well as cast iron. CLEAN 2023 "Big Al" provides good detergency and long life for the removal of coolants, straight oils, corrosion inhibitors, and all types of metalworking fluids.

ADVANTAGES

- Inhibits darkening or smutting of aluminum alloys even at elevated temperatures
- Excellent choice for two- or three-stage spray washers and can be used for washing steel, stainless, cast iron, titanium, and aluminum alloys
- Provides long bath life
- Environmental approvals are simplified because CLEAN 2023 "Big Al" 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 above 120°F (49°C)
- Typically provides up to one week in-process corrosion inhibition on ferrous parts if not rinsed

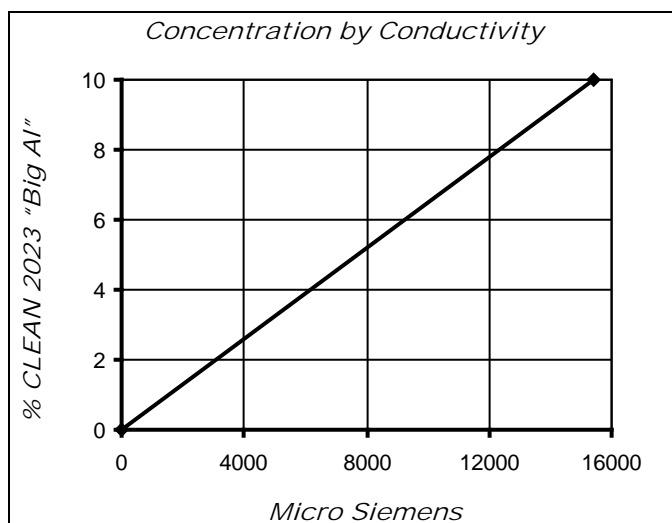
APPLICATION GUIDELINES

- CLEAN 2023 "Big Al" is designed to be used at low concentrations:
 - Spray washer - light soils 3% (33:1)
 - Spray washer - heavy soils 5% (20:1)
 - Agitated immersion washer 5%-10% (20:1-10:1)
- In spray applications, this product should be heated above 120°F (49°C) to avoid foaming. Agitated immersion washers can often run at room temperature. The temperature limit for this product is 160°F (71°C), unless otherwise advised by your Master Chemical representative.
- CLEAN 2023 "Big Al" should be rinsed in most applications. If ferrous or copper alloy parts are rinsed, a corrosion inhibitor such as Master STAGES™ NOCOR® S2 should be used in the rinse stage. Aluminum parts would require no additional protection.
- For additional product applications information including performance optimization, please contact your Master Chemical Authorized Distributor at 2trim.us/distributors.php, your District Sales Manager, the Tech Line at 1-800-537-3365, or visit our web site at www.master-stages.com.

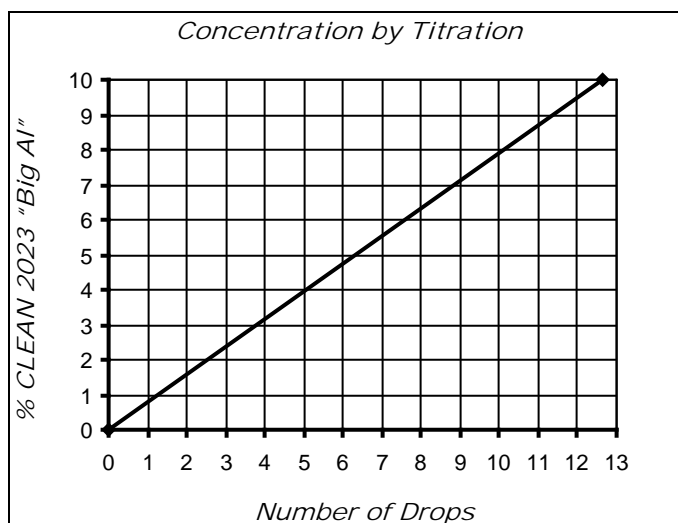
PHYSICAL PROPERTIES (TYPICAL DATA)

Color (Concentrate)	Pale yellow	Flash Point	Nonflammable (ASTM D92-90)
Color (Working Solution)	Pale yellow	pH (Typical Operating as a Range)	11.7-12.2
Odor	Mild	Conductivity Factor00065
Form	Liquid	Titration Factor (CL-1 Titration Kit)	0.79

CLEAN 2023 "Big Al"



% Concentration = Conductivity in Micro Siemens x Factor
Conductivity Factor = .00065



% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.79 One Vial

CHECKING CONCENTRATION

CLEAN 2023 "Big Al" concentration may be checked by titration or conductivity for working solutions.

TITRATION

Use Master STAGES Titration Kit CL 1, Indicator A, and one vial of working solution.

Drops of Acid	2	4	6	8	10	13
% CLEAN 2023 "Big Al"	1%	3%	4%	6%	8%	10%

Titration Formula: Drops of Acid x 0.79 = % Concentration of CLEAN 2023 "Big Al"

MIXING INSTRUCTIONS

The recommended use concentration of CLEAN 2023 "Big Al" is 3%-10% in water. No special mixing procedures are required. Add the required amount of concentrate to the required amount of water and stir or operate the washer until uniformly mixed.

HEALTH & SAFETY

See the most recent MSDS at 2trim.us/s/?i=1116-en-US-US.



NOTES

- Packaging: North America – 5-gallon pail, 54-gallon drum, 270-gallon tote bin,
- Packaging: Europe/Asia – 20-litre pail, 204-litre drum, and 1000-litre IBC.

The information herein is given in good faith and believed current as of the date of this Data & Information sheet 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 Chemical Corporation for further information. For the most recent version of this document, please go to this URL: 2trim.us/di/?i=18

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