

Hydrochloric Acid 5%, Aqueous for Acid Cleaning Glassware – Technical Memo

SOLUTION:	Part 12086A	Part 12086B	Part 12086C
Hydrochloric Acid 5%, Aqueous	1 Liter	1 Gallon	20 Liters

For storage requirements and expiration date refer to individual bottle label.

APPLICATION:

Newcomer Supply Hydrochloric Acid 5%, Aqueous is a ready-to-use solution for acid cleaning glassware and is instrumental in ensuring laboratory glassware/plasticware is properly acid cleaned prior to solution preparation and performing silver, iron or calcium staining procedures.

METHOD:

Solutions: All solutions are manufactured by Newcomer Supply, Inc.

PROCEDURE:

1. Before proceeding with acid cleaning, all glassware/plasticware should be cleaned with a laboratory grade glassware detergent, washed and well rinsed.
 - a. *Most new glass is slightly alkaline and should be washed before initial use.*
2. Using appropriate safety precautions, pour sufficient Hydrochloric Acid 5%, Aqueous into glassware; gently swirl to thoroughly coat all surfaces/sides/edges with the solution.
3. Repeat this process for all glassware/plasticware to be used in procedures that requires acid cleaning, including bottles, beakers, flasks, Coplin jars, graduated cylinders, stir rods, pipettes, thermometers and lids.
 - a. *See Procedure Note #1.*
4. Rinse all glassware/plasticware with a minimum of four changes of distilled water, ensuring that all surfaces/sides/edges have been rinsed well.
 - a. *It is essential that the final rinses are distilled water or chlorine-free water. Tap water rinses may leave surface contaminates on glassware/plasticware resulting in potential staining issues.*
5. Dry glassware in a designated area for acid cleaned glassware.

PROCEDURE NOTE:

1. Use fresh Hydrochloric Acid 5%, Aqueous with every batch of glassware acid cleaned. The solution can be reused on multiple pieces of glassware/plasticware that are acid cleaned at the same time.

REFERENCES:

1. aceglass.com. "What Are Good Cleaning Techniques for Laboratory Glassware?," December 20, 2016.
2. Sheehan, Dezna C., and Barbara B. Hrapchak. *Theory and Practice of Histotechnology*. 2nd ed. St. Louis: Mosby, 1980. 134.
3. Modifications developed by Newcomer Supply Laboratory.