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| **Hand Washing Reusable Laboratory Dishware** | | | | | | |
| **Purpose** | This procedure provides instructions for HAND WASHING REUSABLE LABORATORY DISHWARE. | | | | | |
| **Policy Statements** | Dishware must be clean and free of residue to prevent interference in laboratory testing procedures. | | | | | |
| **Supplies** | Detergent (Liquinox) | | | | | |
|  | Method A | | | | | Method B |
|  | * Distilled water * 0.2% bromcresol purple solution:   + Dissolve 0.1gm bromcresol purple in 50 mL 100% ethanol   + Stable one year at room temperature | | | | | * Distilled water * pH paper |
| **Quality Control** | Testing for detergent residue using Method A:   1. Add approximately 5 cm (2 inches) distilled water into a representative, washed, dishware item (both plastic and glass items should be tested). 2. Add two (2) drops bromcresol solution to the container. 3. A purple color reveals residual detergent. A yellow color indicates satisfactory rinsing. 4. If detergent residue is present, dishware from the same batch should be rewashed and/or re-rinsed and checked again for residue.   Testing for detergent residue using Method B:   1. Test pH of distilled water. It should read approximately 7. 2. Pour distilled water into a piece of cleaned dishware. 3. Agitate to extract any possible residues. 4. Test pH. It should read approximately 7. 5. If pH is > 8, indicating detergent residue, dishware from the same batch should be rewashed and/or rinsed again and pH rechecked. | | | | | |
| **Procedure** | Follow the activities in the table below to HAND WASH REUSABLE LABORATORY DISHWARE. | | | | | |
|  | **Step** | **Action** | | | | |
|  | 1 | Wear gloves, lab coat and other appropriate protective equipment while cleaning dishware. | | | | |
|  | 2 | Inspect dishware for chips, cracks and other signs of breakage. Dispose of broken dishware in a sharps container. | | | | |
|  | 3 | Fill wash container with detergent (e.g.Liquinox) and tap water.  (10mL/1L) | | | | |
|  | 4 | Rinse residue from soiled dishware with tap water before placing into wash water. | | | | |
|  | 5 | Remove all labels. | | | | |
|  | 6 | Hand wash using a brush to scrub inside and outside surfaces. | | | | |
|  | 7 | Rinse several times with tap water and inspect for dried materials, stains, oily film or detergent residue. | | | | |
|  | 8 | Do a final rinse with distilled water. | | | | |
|  | 9 | Air dry. | | | | |
|  | 10 | Perform Quality Control at least weekly on a randomly selected piece of clean dishware.  Document results and any corrective action. | | | | |
| **Supporting Documents** | [MCVI 6.91 Detergent Residue Testing (Dishwasher Washed Glassware)](http://intranet.childrensmn.org/References/labsop/mcvi/equip/mcvi-6.91-detergent-residue-testing-(dishwasher-washed-glassware).pdf)   |  | | --- | |  | | | | | | |
| **References** | 1. Corning, *Suggestions for Cleaning Laboratory Glassware,* 2009. 2. Alconox, Inc, *Liquinox*, Technical Bulletin, 2012. 3. CLSI. *Laboratory Instrument Implementation, Verification and Maintenance; Approved Guideline.* CLSI document GP31-A. Clinical and Laboratory Standards Institute, Wayne, PA, 2009. 4. College of American Pathologists Laboratory General Checklist, GEN.41770 Glassware Cleaning, 08.17.2016. | | | | | |
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| **Historical Record** | **Version** | | **Written/Revised by:** | **Effective Date:** | **Summary of Revisions** | |
| 1 | | Carol Cram | Unknown | Initial Version | |
|  | 2 | | Kerstin Halverson | 07/01/2003 |  | |
|  | 3 | | Carol Buhl | 07/26/2013 | Reformatted to CMS.  Added references.  Removed pipette washing section. | |
|  | 4 | | Carol Buhl | 12/22/2014 | Moved content from ‘Special Safety Precautions’ to ‘Procedure’ section.  Deleted ‘Special Safety Precautions’ section. | |
|  | 5 | | Carol Buhl | 07/21/2017 | Added bromcresol purple method of residue detection.  Added supporting document MCVI 6.91. | |