



Designation: F 1021 – 95 (Reapproved 2001)

Standard Specification for Feeders, Detergent, Rinse Agent, and Sanitizing Agent for Commercial Dishwashing and Glasswashing Machines¹

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This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers detergent feeders, rinse additive feeders, and sanitizing agent feeders intended to automatically maintain the concentration of additives in the wash, recirculated rinse, or non-recirculated rinse water of commercial spray-type dishwashing and glasswashing machines.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 ASTM Standards:

A 167 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip²

D 3951 Practice for Commercial Packaging³

F 760 Specification for Food Service Equipment Manuals⁴

2.2 NSF International Standards:

NSF No. 29 Detergent/Chemical Feeders for Commercial Dishwashing Machines⁵

NSF No. 51 Plastic Material and Components Used in Food Equipment⁵

NSF Food Service Equipment Listing⁵

2.3 Underwriters Laboratories Standards:

UL 94 Test for Flammability of Plastic Materials for Parts in Devices and Appliances⁶

UL 73 Motor Operated Appliances⁶

2.4 American Society of Sanitary Engineering Standards:

ASSE 1001 Pipe Applied Atmospheric Vacuum Breakers⁷

2.5 Building Officials and Code Administrators International Standard:

BOCA Basic Plumbing Code⁸

3. Terminology

3.1 Definitions:

3.1.1 *detergent feeder*—a device that automatically feeds detergents into wash tanks of commercial dishwashing and glasswashing machines.

3.1.2 *rinse additive feeder*—a device that automatically feeds rinse additives into rinse water of commercial dishwashing and glasswashing machines.

3.1.3 *sanitizing agent feeder*—a device that automatically feeds sanitizer into rinse water of commercial dishwashing and glasswashing machines.

4. Classification

4.1 *General*—Detergent, rinse additive, and sanitizing agent feeders shall be of the following types and styles as specified.

4.2 Types:

4.2.1 *Type I*—Detergent feeder, concentration sensing or controlling.

4.2.2 *Type II*—Detergent feeder, timed delivery.

4.2.3 *Type III*—Rinse additive feeder, flow/pressure, or electrically activated.

4.2.4 *Type IV*—Rinse additive feeder, timed delivery.

4.2.5 *Type V*—Sanitizing agent feeder, flow/pressure, or electrically activated.

4.2.6 *Type VI*—Sanitizing agent feeder, timed delivery.

4.3 Styles:

4.3.1 *Style I*—Detergent feeder, powder product.

4.3.2 *Style II*—Detergent feeder, liquid product.

4.3.3 *Style III*—Detergent feeder, slurry product.

4.3.4 *Style IV*—Detergent feeder, solid cast product.

4.3.5 *Style V*—Rinse additive feeder, liquid product.

4.3.6 *Style VI*—Rinse additive feeder, solid cast product.

4.4 All detergent, rinse additive, and sanitizing feeders of the same manufacture, classification, and model designation shall be identical to the extent necessary to ensure interchangeability of component parts, assemblies, and spare parts.

¹ This specification is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.01 on Cleaning and Sanitation Equipment.

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² *Annual Book of ASTM Standards*, Vol 01.03.

³ *Annual Book of ASTM Standards*, Vol 15.09.

⁴ *Annual Book of ASTM Standards*, Vol 15.08.

⁵ Available from NSF International, P. O. Box 1468, Ann Arbor, MI 48106.

⁶ Available from Underwriters Laboratories, Inc., 333 Pfingsten Rd., Northbrook, IL 60062.

⁷ Available from American Society of Sanitary Engineering, P.O. Box 9712, Bay Village, OH 44140.

⁸ Available from Building Officials and Code Administrators International, 4051 West Flossmoor Rd., Country Club Hills, IL 60477.