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(For NSF International internal use)

Joint Committee Issue Document

Submitter:

Angie Ewing
NSF International
789 N Dixboro Road
Ann Arbor, MI 48105

734-769-8010 /ext 2293
aewing@nsf.org

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Signature of Submitter * Angie Ewing Date July 20, 2007

**Type written name will suffice as signature*

Action: **X** Information:

NSF Standard Impacted: NSF/ANSI 60

Issue Statement:

The minimum recorded weights in Preparation Method K (B.3.12) are too low.

Background:

Preparation Method K is used to prepare metal salt coagulants such as alum, ferric chloride, ferrous chloride, ferric sulfate, ferrous sulfate, and polyaluminum sulfate. Those that are provided as coagulant solutions go through a step that estimates the amount of product being tested on a dry weight basis. This part of the procedure involves weighing a 100 mL volumetric flask when empty, when filled with 20 to 50 mLs of coagulant solution, and when full. The relative weights of these are in the 50gram to 200gram range. Although an analytical balance used to measure these weights can have readout down to the 0.0001 gram (0.1 mg), that low of a reading is beyond the accuracy of the calibration of the balance when used to measure items in the 50gram to 200gram range.

The method currently requires recording weight measurements to the nearest 0.1 mg. Raising the minimum recording requirements to 0.01 gram (10 mg) would still provide 3 significant figures dry weight of product estimated through this method.

Recommendation:

Recommendation attached.

Submitter Angie Ewing Date October 17, 2007

Proposed revision to NSF/ANSI 60: Preparation Method K

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B.3.12.1 Preparation

For the preparation of coagulant solutions, the amount of product on a dry weight basis shall be determined. To calculate the weight of the material (dry basis) in a coagulant solution, the following procedure shall be followed.

a) Weigh a clean, dry 100 mL volumetric flask to the nearest ~~0.1 mg~~ 0.01g (Wt A).

b) Pipette a known volume (20-50 mL) of well-mixed coagulant solution into the flask. (Take care not to touch the ground glass.)

c) Weigh the flask and contents to the nearest ~~0.1 mg~~ 0.01g (Wt C).

d) Dilute the solution to volume with DI water. (Take care not to wet the ground glass.) Do not mix.

e) Weigh the flask and contents to the nearest ~~0.1 mg~~ 0.01g (Wt D).

f) After weighing, mix the contents thoroughly and transfer into a 125 mL bottle.

g) Thoroughly rinse the flask with DI water, allow the neck of the flask to dry, then fill the flask to volume with DI water. (Take care not to wet the ground glass.)

h) Weigh the flask and water to the nearest ~~0.1 mg~~ 0.01g (Wt B).

i) The weight of the material (dry basis) shall be calculated as follows:

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Reason: Provides practical limitations for weights recorded during the estimation of chemical tested on a dry weight basis.