



Designation: E786 – 81 (Reapproved 2017)

Standard Specification for Dishes, Evaporating, Platinum¹

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

1. Scope

1.1 This specification covers platinum evaporating dishes suitable for water analysis and laboratory use.

2. Referenced Documents

2.1 *Federal Standards:*²

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)

2.2 *Military Standards:*²

MIL-STD-105 Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-129 Marking for Shipment and Storage

MIL-STD-1188 Commercial Packaging of Supplies and Equipment

3. Classification

3.1 *Types and Capacities*—Platinum evaporating dishes shall be of the following types and capacities as specified (see S2.1).

3.1.1 *Type I*—Shallow form without pour-out spout. Capacity: 100 mL.

¹ This specification is under the jurisdiction of ASTM Committee E41 on Laboratory Apparatus and is the direct responsibility of Subcommittee E41.01 on Laboratory Ware and Supplies.

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² Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://www.dodssp.daps.mil>.

3.1.2 *Type II*—Regular form with pourout spout. Capacity: 50 mL.

3.1.3 *Type III*—125 mL.

4. Materials

4.1 Unless otherwise specified, the platinum dishes shall be made of 99.9 % platinum alloyed with not more than 0.4 % iridium.

5. Dimensions, Mass, and Permissible Variations

5.1 Platinum evaporating dishes shall be either of two types: Type I, shallow dish without pourout spout, having slightly tapered sides and a flat bottom having a minimum thickness of 0.16 mm; or Type II, rounded bottom with a pourout spout conforming to the dimensions in [Table 1](#).

6. Workmanship

6.1 Platinum evaporating dishes shall be free of defects (scratches, dents, punctures) and contamination (grease, oil, foreign matter) that detract from their appearance or that will impair their serviceability.

7. Marking

7.1 Platinum evaporating dishes shall be permanently and legibly marked with the name or registered trademark of the manufacturer.

8. Keywords

8.1 dishes; evaporating; platinum

TABLE 1 Dimensions of Platinum Evaporating Dishes

Type	Capacity, mL	Top Inside Diameter, mm	Height, mm	Weight, g
I	100	76 ± 6	27.5 ± 7.5	35 ± 5
II	50	54.5 ± 2	27 ± 2	19.5 ± 5
III	125	78 ± 2	35.5 ± 2	42 ± 10

SUPPLEMENTARY REQUIREMENTS

The following supplementary requirements are binding when this specification is used by the Department of Defense and the Federal Government for the procurement of platinum evaporating dishes.

S1. Sampling

S1.1 Sampling for nondestructive examination shall be conducted in accordance with MIL-STD-105.

S2. Ordering Information

S2.1 *Procurement documents should specify the following:*

S2.1.1 Title, number, and date of this ASTM specification.

S2.1.2 Level of packaging and packing required,

S2.1.3 Type and capacity (when applicable) of evaporating dish required, and

S2.1.4 Material if other than as specified.

S2.2 *Supplier's Responsibility*—The supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may use his own or any other inspection facilities and services acceptable to the government. Inspection records of the examination and tests shall be kept complete and available to the government as specified in the contract or order. The government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure that supplies and services conform to prescribed requirements.

S2.3 *Transportation Description*—Transportation description applicable to this item is: Dish, Evaporating, Platinum, Not taken by Freight and Ship only via UPS or Parcel Post.

S3. Lotting and Sampling

S3.1 A lot shall consist of the platinum evaporating dishes of the same type and the same capacity offered for acceptance at one time, which has been produced by one manufacturer under essentially the same manufacturing conditions.

S3.2 Sampling shall be conducted in accordance with Section S1.

S4. Inspection

S4.1 *Examination*—Sample platinum evaporating dishes and Level A and commercial packaging inspection thereof shall be examined in accordance with the classification of defects and with MIL-STD-105.

S4.1.1 Classification of defects shall be in accordance with **Table S4.1** and **Table S4.2**.

S4.2 *Special Provisions:*

TABLE S4.1 Classification of Defects of Platinum Dishes

Categories	Defects
Critical:	none defined.
Major:	AQL 4.0 % defective.
101	dimensions incorrect.
102	damaged (scratches, dents or punctures).
103	contamination (oil, grease, or foreign matter).
104	marking illegible, incorrect, or missing.

TABLE S4.2 Classification of Defects of Level A and Commercial Packaging

Categories	Defects
Critical:	none defined.
Major:	AQL 2.5 % defective.
101	unit container not as specified.
102	cushioning not as specified.
103	shipping container not as specified.
104	shipping container closure not as specified.
105	marking illegible, incorrect, or incomplete.

S4.2.1 Alternative inspection (including testing) procedures. The supplier may utilize any alternative inspection procedure that will ensure equal or better quality by submitting a written proposal with justification and obtaining written approval from the government prior to instituting the procedure. In case of dispute, the procedures of this specification will govern.

S4.2.2 *Supplemental Evidence*—The supplier shall provide evidence acceptable to the contracting officer that the requirements of 4.1 and S7, have been satisfied.

S5. Rejection Criteria

S5.1 The sample must pass all physical and chemical requirements when tested as specified to be accepted. Any test failure will result in the rejection of the lot.

S6. Certification

S6.1 Compliance with all stipulations of this specification regarding fill, closure, marking and other requirements not involving tests will be certified by the supplier.



S7. Marking

S7.1 *Civil Agencies*—In addition to any special marking required by the contract or order, interior packages and exterior shipping containers shall be marked in accordance with Fed. Std. No. 123.

S7.2 *Military Agencies*—In addition to any special marking required by the contract or order, unit intermediate packages and exterior shipping boxes shall be marked in accordance with

MIL-STD-129. All containers shall bear the name of the item, the national stock number, and the quantity contained therein and “FRAGILE—HANDLE WITH CARE.”

S7.3 *Commercial*— In addition to any special marking required by the contract or order, marking shall be accomplished in accordance with MIL-STD-1188.

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