



Standard Specification for Refined Antimony¹

This standard is issued under the fixed designation B 237; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This standard covers refined antimony in ingot, pig, or cake form.

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.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 The following documents of the issue in effect on the date of material purchase form a part of this specification to the extent referenced herein.

2.2 ASTM Standards:

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications²

E 88 Practice for Sampling Nonferrous Metals and Alloys in Cast Form for Determination of Chemical Composition³

3. Ordering Information

3.1 Orders for refined antimony under this specification shall include the following information:

- 3.1.1 ASTM designation and year of issue,
- 3.1.2 Quantity (weight),
- 3.1.3 Name of material (Refined Antimony),
- 3.1.4 Size and shape (Section 6),
- 3.1.5 Grade (Table 1), and
- 3.1.6 Certification or test report, if specified (Section 13).

4. Materials and Manufacture

4.1 Refined antimony shall be supplied in commercial standard forms (for example, ingots, pigs, or cakes) in the following grades:

- 4.1.1 Grade A
- 4.1.2 Grade B

TABLE 1 Chemical Composition Requirements

Element	Composition, weight, %	
	Grade A	Grade B
	UNS M00998	UNS M00995
Arsenic, max	0.05	0.10
Sulfur, max	0.10	0.10
Lead, max	0.15	0.20
Other elements (for example, iron, copper, tin, silver, nickel) each, max	0.05	0.10
Antimony (by difference), min	99.80	99.50

4.2 The grades of refined antimony shall be produced by any smelting and refining process from ore or recycled materials to meet the chemical requirements of this specification.

5. Composition

5.1 The refined antimony shall conform to the chemical composition requirements prescribed in Table 1.

6. Sizes and Shapes

6.1 Ingots, cakes, or pigs shall weigh up to a nominal 100 lb (45 kg).

7. Physical Appearance

7.1 The antimony shall be reasonably free from surface corrosion or adherent foreign material.

8. Marking

8.1 A brand by which the manufacturer can be identified shall be cast into each ingot.

9. Sampling for Chemical Analysis

9.1 *Samples*—Ten ingots shall constitute a representative sample of any shipment lot up to 50 000 lb (18 700 kg) or fraction thereof. When a shipment exceeds 50 000 lb, an additional ingot shall be added for each additional 5000 lb (1870 kg) or fraction thereof. In the case of shipment lots of ten ingots or less, each ingot shall be drilled once to provide a sufficient sample for analysis.

9.2 *Drilling*—The ingots shall be sampled by drilling through with a drill ½ in. (2.7 mm) in diameter. The drill shall be cleaned thoroughly before use, and no lubricant shall be used in drilling. Each sample ingot shall be drilled through once from top to bottom. One of three ingots shall be drilled centrally, while the other two shall be drilled midway between

¹ This specification is under the jurisdiction of ASTM Committee B-2 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.02 on Refined Lead, Tin, Antimony, and Their Alloys.

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² Annual Book of ASTM Standards, Vol 14.02.

³ Annual Book of ASTM Standards, Vol 03.05.