

Designation: B 237 - 01

# Standard Specification for Refined Antimony<sup>1</sup>

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 reapproval. A superscript epsilon  $(\epsilon)$  indicates an editorial change since the last revision or reapproval.

# 1. Scope

- 1.1 This specification 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 Specifications<sup>2</sup>
  - E 88 Practice for Sampling Nonferrous Metals and Alloys in Cast Form for Determination of Chemical Composition<sup>3</sup>

## 3. Terminology

- 3.1 Definition of Term Specific to This Standard:
- 3.1.1 cake, n—the term cake as used in this specification is defined as a coalesced mass of antimony powder.

#### 4. Ordering Information

- 4.1 Orders for refined antimony under this specification shall include the following information:
  - 4.1.1 ASTM designation and year of issue,
  - 4.1.2 Quantity (weight),
  - 4.1.3 Name of material (Refined Antimony),
  - 4.1.4 Size and shape (Section 7),
  - 4.1.5 Grade (Table 1), and
  - 4.1.6 Certification or test report, if specified (Section 14).

TABLE 1 Chemical Composition Requirements<sup>A</sup>

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

<sup>&</sup>lt;sup>A</sup>For purposes of acceptance and rejection, the observed value or calculated value obtained from analysis should be rounded to the nearest unit in the last right-hand place of figures, used in expressing the specified limit, in accordance with the rounding procedure prescribed in Practice E 29.

## 5. Materials and Manufacture

- 5.1 Refined antimony shall be supplied in commercial standard forms (for example, ingots, pigs, or cakes) in the following grades:
  - 5.1.1 Grade A
  - 5.1.2 Grade B
- 5.2 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.

# 6. Composition

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

#### 7. Sizes and Shapes

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

# 8. Physical Appearance

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

## 9. Marking

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

### 10. Sampling for Chemical Analysis

10.1 Samples—Ten ingots shall constitute a representative sample of any shipment lot up to 50 000 lb (18 700 kg) or

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee B02 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.02 on Refined Lead, Tin, Antimony, and Their Alloys.

Current edition approved Nov. 10, 2001. Published January 2002. Originally published as B 237 – 95. Last previous edition B 237 – 96.

<sup>&</sup>lt;sup>2</sup> Annual Book of ASTM Standards, Vol 14.02.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 03.05.