This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.



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Standard Specification for Calcium-Silicon Alloys¹

This standard is issued under the fixed designation A495; 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 (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers a standard grade of calciumsilicon, a standard grade of calcium-manganese-silicon, a standard grade of calcium-silicon-barium, and a standard grade of ferro-calcium-silicon.

1.2 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:²

A1025/A1025M Specification for Ferroalloys and Other Alloying Materials, General Requirements

3. General Conditions for Delivery

3.1 Material furnished to this specification shall conform to the requirements of Specification A1025/A1025M, including

any supplementary requirements that are indicated in the purchase order. Failure to comply with the general requirements of Specification A1025/A1025M constitutes nonconformance with this specification. In case of conflict between the requirements of this specification and Specification A1025/A1025M, this specification shall prevail.

4. Chemical Requirements

4.1 The material shall conform to the requirements as to chemical composition specified in Tables 1 and 2. The manufacturer shall furnish an analysis of each shipment showing the percentage of each element specified in Table 1.

4.2 For the elements specified in Table 2, an analysis of each lot is not required. Upon request of the purchaser, the manufacturer shall supply the results of an analysis for the elements in Table 2 on a cumulative basis over a period mutually agreed upon by the manufacturer and the purchaser.

5. Size

5.1 Calcium-silicon alloys are available in sizes as listed in Table 3.

5.2 The sizes listed in Table 3 are typical as shipped from the manufacturer's plant. These alloys are friable and some attrition can be expected in transit, storage, and handling. The friability rating for these alloys is Code No. 6, the most friable rating on the scale.

6. Sampling

6.1 Methods of sampling may be agreed upon by the manufacturer and the purchaser.

¹ This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee A01.18 on Castings.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.