



Designation: C 322 – 82 (Reapproved 1997)^{ε1}

Standard Practice for Sampling Ceramic Whiteware Clays¹

This standard is issued under the fixed designation C 322; 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.

^{ε1} NOTE—Section 3 was added editorially in October 1997.

1. Scope

1.1 This practice covers procedures for sampling bulk and bagged shipments of ceramic whiteware clays.

2. Sampling

2.1 Where a bulk shipment consists of lumps, a number of pieces shall be picked from different parts of the car, so that the final sample will represent an average of all parts of the shipment from top to bottom. For a 30-ton (27-Mg) unit, no less than 20 samples of approximately 10 lb (4.5 kg) each shall be taken from different parts of the car. This may be done by digging holes at equally spaced intervals in the loaded car, or by removal during loading or unloading, at spaced intervals. The lumps shall then be broken to pieces no larger than 4 in. (102 mm), in the largest dimension, and the several samples shall be made into a composite lot, by turning with a shovel on a clean floor. The composite shall then be quartered or riffled to

provide a 10-lb laboratory sample.

2.2 Where a bulk shipment consists of shredded or coarsely ground clay, sampling shall be done at 20 points for a 30-ton (27-Mg) unit; the samples may be taken with a shovel, or with a grain sampler, if the form of the clay permits. The samples so taken shall then be mixed thoroughly, and quartered or riffled to form a 10-lb (4.5-kg) (or proportionately larger) laboratory sample.

2.3 For bagged lots of ground or air-floated clay, the number of samples taken shall depend on the number of units in a shipment. A grain-sampler or similar sampling instrument shall be used to take samples which then shall be combined, mixed, and quartered or riffled to obtain a 10-lb (4.5-kg) laboratory sample. Where a shipment consists of 100 bags or less, the number of bags sampled at random shall be not less than 5 and preferably 10. When the number of bags is greater than 100 but less than 500, the number of bags sampled shall not be less than 15. For lots of from 500 to 1000 bags, 20 bags shall be sampled. For shipments of 1000 to 2000 bags, 30 bags shall be sampled at random.

3. Keywords

3.1 clay; sampling

¹ This practice is under the jurisdiction of ASTM Committee C-21 on Ceramic Whitewares and Related Products and is the direct responsibility of Subcommittee C21.04 on Clays.

Current edition approved June 25, 1982. Published August 1982. Originally published as C 322 – 53. Last previous edition C 322 – 56 (1981).

The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

This standard is copyrighted by ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (<http://www.astm.org>).