Designation: C 737 – 02

Standard Specification for Limestone for Dusting of Coal Mines[1]

This standard is issued under the fixed designation C 737; 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 limestone suitable for use as dust in coal mines to prevent coal dust explosions.

NOTE 1—In coal mine operations, limestone is dusted onto coal exposures in sufficient amount so that not less than 65 % of all loose dust shall be limestone. With such a concentration of limestone, explosions cannot initiate or be propagated from nearby gas explosions. The limestone must be substantially dry in order to dust satisfactorily.

1.2 *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 *ASTM Standards:*

C 25 Test Methods for Chemical Analysis of Limestone, Quicklime, and Hydrated Lime[2]

C 50 Methods for Sampling, Inspection, Packaging, and Marking of Lime and Limestone Products[2]

C 110 Test Methods for Physical Testing of Quicklime, Hydrated Lime, and Limestone[2]

3. Chemical Composition

3.1 Limestone shall conform to the following as to chemical composition:

Moisture (at point of manufacture), max, %	0.5
Silica, free and combined, max, %	4.0

4. Physical Properties

4.1 Limestone for this application shall have the following particle size:

Passing a No. 20 (850-μm) sieve, min, %	100
Passing a No. 200 (75-μm) sieve, min, %	70

5. Test Methods

5.1 *Chemical Analysis*—The chemical analysis of the limestone shall be conducted in accordance with Test Methods C 25.

5.2 *Particle Size*—The sieve analysis of limestone shall be conducted in accordance with Test Methods C 110.

6. General Requirements

6.1 Either high calcium or dolomitic limestone may be furnished for this application.

7. Sampling, Inspection, etc.

7.1 The sampling, inspection, rejection, retesting, packaging, and marking shall be conducted in accordance with Methods C 50.

8. Keywords

8.1 coal mines; dolomitic limestone; high calcium limestone; limestone; limestone dust; mine explosions; moisture content; silica content

[1] This specification is under the jurisdiction of ASTM Committee C07 on Lime and is the direct responsibility of Subcommittee C07.03 on Industrial Uses.

Current edition approved Dec. 10, 2002. Published January 2003. Originally approved in 1973. Last previous edition approved in 1997 as C 737–97.

[2] *Annual Book of ASTM Standards*, Vol 04.01.