
Standard Method of Test for Sampling and Testing Calcium Chloride for Roads and Structural Applications

AASHTO Designation: T 143-13 (2021)

Technically Revised: 2013

Reviewed but Not Updated: 2021

Editorially Revised: 2021

Technical Subcommittee: 4c, Markings and Coatings



**American Association of State Highway and Transportation Officials
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1. SCOPE

- 1.1. This test method describes the sampling of both solid and liquid forms of calcium chloride and brine using calcium chloride. It also describes the sieving procedure for the solid form of calcium chloride.
- 1.2. The Appendix describes a rapid method for the chemical analysis to determine total chlorides of the calcium chloride sample.
- 1.3. *SI Units*—The values stated in SI units are to be regarded as the standard. The inch-pound equivalents may be approximate. It is common practice in the engineering profession to concurrently use pounds to represent both a unit of mass (lbm) and of force (lbf).
- 1.4. In the English system, the pound (lbf) represents a unit of force (weight). However, the use of balances or scales recording pounds of mass (lbm) should not be regarded as nonconformance with this standard.
- 1.5. *The quality of the results produced by this standard are dependent on the competence of the personnel performing the procedure and the capability, calibration, and maintenance of the equipment used. Agencies that meet the criteria of R 18 are generally considered capable of competent and objective testing/sampling/inspection/etc. Users of this standard are cautioned that compliance with R 18 alone does not completely assure reliable results. Reliable results depend on many factors; following the suggestions of R 18 or some similar acceptable guideline provides a means of evaluating and controlling some of those factors.*

2. REFERENCED DOCUMENTS

- 2.1. *AASHTO Standards:*
 - [M 144](#), Calcium Chloride
 - [M 231](#), Weighing Devices Used in the Testing of Materials
 - [R 18](#), Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories
 - [R 66](#), Sampling Asphalt Materials
 - [T 27](#), Sieve Analysis of Fine and Coarse Aggregates
- 2.2. *ASTM Standards:*
 - [D1429](#), Standard Test Methods for Specific Gravity of Water and Brine