

This specification covers the requirements for the supply and application of a solution of calcium chloride in water to such areas of gravel roads that the Owner may designate.

PART 1 REFERENCES

ASTM International

D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft³ (600 kN-m/m³))

Canadian General Standards Board (CGSB)

CAN/CGSB-15.1 Calcium Chloride

1.1 NOT APPLICABLE

PART 2 GENERAL

2.1 DELIVERY, STORAGE, AND HANDLING

.1 Deliver, store and handle materials in accordance with Section 01600 – Material and Equipment

.2 Delivery and Acceptance Requirements: Deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

.1 Supply ~~The calcium chloride shall be delivered to the site in the form of crystal flakes.~~

.2 Deliver calcium chloride to site in moisture-proof bags, in bulk in tank cars, in covered hopper cars, or in covered trucks. Indicate name of manufacturer, name of product, net weight or mass, and percentage of calcium chloride guaranteed by manufacturer.

.3 Storage and Handling Requirements:

.1 Store bags of calcium chloride in weather-proof enclosures.

PART 3 PRODUCTS

3.1 MATERIALS

.1 Calcium chloride, Type I: To CAN/CGSB-15.1, flake. ~~The calcium chloride shall be delivered to the site in the form of crystal flakes.~~

~~4.2~~ Only calcium chloride flakes acceptable to the Owner shall be used. Water for forming the solution with the calcium chloride shall be clean water free of impurities.

~~2.3~~ The Contractor shall supply the calcium chloride and the water.

PART 4 EXECUTION

4.1 APPLICATION

- .1 The Owner will designate the limits between which the calcium chloride treatment is to be applied to the road.
- .2 The Contractor shall grade up the road to be treated to obtain a smooth grade prior to application of the calcium chloride.
- .3 The Contractor shall form a solution of calcium chloride and water of known proportions, so that the rate of application of calcium chloride is known and can be controlled by manipulation of the spreader.
- .4 The rate of application of the solution shall be such that the required weight of dissolved flakes is applied to each square metre of road surface. The rate of application shall be 0.9 kilograms of dissolved flakes per square metre, or such other rate of application of calcium chloride as the Owner may designate.
- .5 The calcium chloride shall be applied uniformly by the approved spreader.
- .6 The Contractor shall compact the treated gravel surface to 100 % of maximum dry density in accordance with ASTM D698~~Standard Proctor Dry Density~~.
- .7 Any spill of calcium chloride such as arising from broken bags or otherwise must be immediately cleaned up. Any quantity of calcium chloride that is recovered from a spill and cannot be utilized in the normal manner must be disposed of at an approved waste disposal site at the Contractor's expense. Information on these sites can be obtained from the provincial Newfoundland and Labrador Government Service Centre. See the procedure for reporting spills as per the requirement of the Department of Government Modernization and Service Delivery, Environmental Protection~~Newfoundland and Labrador Government Service Centre~~.
- .8 Contractors are reminded that the Dust Control subsection of Section 01560 – Environmental Requirements, applies.

PART 5 PAYMENT

5.1 MEASUREMENT FOR PAYMENT

- .1 Measurement for payment shall be of the number of tonnes, rounded to two decimal places, of the calcium chloride flakes made into solution and applied within the required limits. This measurement will be made by computing the net weights of the sacks used.
- .2 Measure supply and application of water for dust control in litres.
- .3 No extra compensation will be paid for ordered and applied on Saturdays, Sundays or holidays.

5.2 BASIS OF PAYMENT

- .1 All costs associated with work as outlined in this specification shall be deemed to be included in the unit price as outlined above in the Measurement for Payment subsection of this section and as included in the MERX Schedule of Quantities and Prices.
- .2 Payment at the contract price for calcium chloride shall be compensation in full for all labour, materials and equipment-use to supply the calcium chloride flakes at the site, supply the water, make up a calcium chloride solution, grade up the area to be treated, apply the calcium chloride solution and compact the road surface.

Not For Construction