



Calcium chloride is applied to control dust or to provide a surface treatment for base course. Application rate is usually determined by the engineer, but is not to exceed 1.5 lbs. of 77% anhydrous chloride content per square yard. Calcium chloride may be applied dry or in solution.

### 3-45.1 Dry Application

When it is applied dry, calcium chloride is required to have an anhydrous chloride content guaranteed to be at least 77% by weight. Payment will be by weight measured directly in tons. Dry chemical is routinely supplied by manufacturers within a chloride range from 77% to 80%.

#### Example 1

100 tons of dry calcium chloride with an 80% chloride content was applied.  
Determine maximum application rate and pay weight.

$$\text{Maximum Application Rate} = 1.5 \times \frac{77}{80} = 1.44 \text{ lbs. / s.y.}$$

Pay weight = 100 tons.

Note that there is no "bonus" or extra payment for a chloride content above 77%.

### 3-45.2 Application in Solution

When calcium chloride is applied in solution, an anhydrous chloride content of at least 32% by weight is required. Payment will be based upon measured weight in tons, adjusted on a basis of 77%.

#### Example 2

A 32% solution was sprayed on. 100 tons were applied.  
Determine maximum application rate and pay weight.

$$\text{Maximum Application Rate} = 1.5 \times \frac{77}{32} = 3.6 \text{ lbs. / s.y.}$$

$$\text{Pay Weight} = 100 \times \frac{32}{77} = 41.6 \text{ tons}$$

#### Example 3

A 38% solution of calcium chloride was sprayed on. 100 tons were applied.  
Determine maximum application rate and pay weight.

$$\text{Maximum Application Rate} = 1.5 \times \frac{77}{38} = 3.0 \text{ lbs. / s.y.}$$

$$\text{Pay Weight} = 100 \times \frac{38}{77} = 49.4 \text{ tons}$$