



# Standard Test Procedures Manual

Section: SAMPLING

Subject: SODIUM CHLORIDE GRANULAR

## 1. SCOPE

### 1.1 Description of Test

This method describes the sampling of sodium chloride granular, i.e.: road salt, at the suppliers manufacturing facility.

### 1.2 Application of the Test

The sample will be used to determine whether or not the material meets the Specification for Manufactured Materials SMM 602-1.

### 1.3 Method of Sampling

The Salt Supplier will keep a cumulative total of the number of tonnes they supply to the Department. For every 500 tonnes of salt delivered, one representative sample from the 500 tonne lot will be randomly taken. The Department shall be permitted, upon request, to take samples from the suppliers production line or truck loading facility.

The sample will be subdivided into three representative smaller samples, one for the Department, one for the supplier, and one referee sample. The department will hold the referee sample. Subsequent pay adjustments are entirely dependent on the sample being representative of the entire 500 tonnes delivery.

The sample must be taken from the 500 tonne lot being delivered to the department. The department in co-operation with the supplier will ensure one representative sample is taken for each 500 tonne lot.

## 2. APPARATUS AND MATERIALS

### 2.1 Equipment

Sample template  
Sample splitter  
Sample Pans  
Sample scoop  
Standard plastic bags approximately 250 mm x 420 mm high  
Sample submission form as shown on Figure 112-1

Section:

SAMPLING

Subject:

SODIUM CHLORIDE GRANULAR

Stapler and staples  
Shipping Tags, Saskatchewan Highways Form 207

Sample bags, submission forms and shipping tags are available from each Testing Services lab. If not, contact Testing Services, Central Laboratory, 1610 Park Street, Regina.

## 2.2 Size of Sample

For each sample, representing 500 tonnes of salt, three samples will be taken each filling approximately one-half to two-thirds of the sample bag.

## 3. PROCEDURE

### 3.1 Sampling from the Conveyor Belt

Obtain at least three approximately equal increments selected at random from the unit or lot being sampled and combine to form a field sample whose mass equals or exceeds the minimum large sample. The large sample should be sufficient to fill four sample bags approximately one-half to two-thirds full.

Stop the conveyor belt while the sample increments are being obtained.

Insert the two templates, the shape of which conforms to the shape of the belt in the salt stream on the belt and space them such that the material contained between will yield the required weight.

Carefully scoop all material between the template into a suitable container and collect the fines on the belt with a brush and dust pan and add to the container.

### 3.2 Sampling from a Flowing Aggregate Stream (Bins or Belt Discharge)

Select at least three random samples by random sample method from the production.

Samples from belt discharge only when plant or belt is operating at normal capacity.

Sample from bin discharge only when bins are nearly full in order to minimize the chance of obtaining segregated material.

Obtain at least three approximately equal increments, at random, and combine to form a field sample whose mass equals or exceeds the minimum large sample. The large sample should be sufficient to fill four sample bags approximately one-half to two-thirds full.

Section:

SAMPLING

Subject:

SODIUM CHLORIDE GRANULAR

Take each increment from the entire cross section of the material as it is being discharged.

For larger plants, a special sampling device may have been constructed on site in order to accomplish the above requirement. A rail or pivot system should be constructed to convey a sampling pan through the discharge stream at a uniform rate. The pan must be large enough to intercept the entire flow and hold the required amount of sample without over flowing.

### **3.3 Dividing and Recording the Samples**

The large sample obtained by either of the above two methods will be subdivided using a sample splitter to obtain three smaller samples for testing purposes. Note, using a sample splitter will divide the larger sample into four smaller samples. The testing procedure only requires three; therefore, the fourth sample would be disposed of. The three samples will be distributed as follows: one for the department, one for the supplier, and one referee sample. The department will be responsible for holding the referee sample.

The sample submission form should be filled out completely and placed inside the sample bag on top of the sampled material.

The top of the sample bag should be folded over several times and stapled closed. Use four or five staples to ensure the sample bag does not open during shipment.

The shipping tag should be filled out and stapled to the outside of the sample bag along the folded edge. Use several staples to ensure the shipping tag does not get lost during shipment.

The sample should be shipped by bus or designated courier to the appropriate Testing Service Lab for analysis.

Section:  
SAMPLING

Subject:  
SODIUM CHLORIDE GRANULAR

SASKATCHEWAN HIGHWAYS AND TRANSPORTATION  
Engineering Services Division

SODIUM CHLORIDE GRANULAR

DEPT. ORDER NO.	_____
DATE DELIVERED	_____
DATE SAMPLED	_____
SAMPLED BY	_____ (Name)
SUPPLIER	_____
TYPE OF SALT DELIVERED (Circle One) Fine Mixed Medium	
SEND TEST RESULTS TO	_____ (Name)

ADMITTANCE NO. \_\_\_\_\_

DATE ADMITTED \_\_\_\_\_

SAMPLE SUBMISSION FORM

FIGURE 112-1