

Tables

Table 1	Comparison of Chemical Deicers in use at various Municipalities/Agencies
Table 2	City of Greater Sudbury Salt/Sand Application Rates
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Table 1 - Use of deicers/winter sand on Roadways

Municipality/Agency	Do you use a chemical deicer to maintain your roadways? (1)	Type of Deicer?	Do you use winter sand to maintain your roadways?	Do you pre-wet your roadway deicer?	Pre-wetting solution?	Do you perform a Direct Liquid Application (DLA) to your roadways?	DLA Solution?
	(all/some/none)		(all/some/none)	(Yes/No)		(Yes/No)	
CGS	some	sodium chloride	some	Y	salt brine	Y	salt brine
City of Timmins	some	sodium chloride	some	N	n/a	N	n/a
City of Sault Ste. Marie	some	sodium chloride	some	N	n/a	N	n/a
City of North Bay	some	sodium chloride	some	Y	calcium chloride	Y	calcium chloride
City of Thunder Bay	some	sodium chloride	some	Y	calcium chloride	N	n/a
Region of Peel	All (only responsible for arterials)	sodium chloride	none	Y	salt brine or mag. chloride	Y	salt brine or mag. chloride
Region of York	all	sodium chloride	some	Y	salt brine	Y	salt brine
Region of Niagara	all	sodium chloride mag. chloride (pilot)	all (in colder temps)	Y	salt brine	Y	salt brine
City of Hamilton	some (85%)	sodium chloride	some	Y	sugar-beet juice product	Y	salt brine
City of Barrie	some	sodium chloride and treated salt	some	Y	salt brine and "Magic-0"	Y	salt brine
Ministry of Transportation	all	sodium chloride	some	Y	salt brine, mag. chloride or calcium chloride (depending on climate)	Y	salt brine, mag. chloride or calcium chloride (depending on climate)
Greater Toronto Airport Authority	all	sodium chloride or "Mountain Melt Deicer" (on terminal roofs only)	none	Y	salt brine	Y	salt brine
City of Mississauga	all	Mag. chloride treated salt	none	N planning to next year	salt brine when implemented	Y	salt brine

Note: (1) The use of chemical deicers is based on the assumption that the weather (air temperature) is conducive to their use.

Table 2 – CGS Salt/Sand Application Rates

Storm Response Guide							
Current Temperature	Current Pavement Condition	Current Precipitation	Possible Action	Salt/Sand Application Rates			
				Class 1 to 3 Roads			Class 4 to 6 Roads
				Brine (Litres)	Salt (Kg/2-Lane KM)	Sand (Kg/2-Lane KM)	Sand
0°C and above	Wet	Snow	Plow and Sand or Salt	65	60 to 90	Nil*	100 to 310
		Freezing Rain	Sand and Salt	65	150	Nil*	310
-4°C to 0°C	Wet	Snow	Plow and Sand or Salt	65	90 to 115	Nil*	100 to 310
		Freezing Rain	Sand and Salt	65	150	Nil*	310
-12°C to -4°C	Snow Packed	Nil	Plow and Salt	65	115 to 150	Nil*	Nil*
	Snow Packed	Snow	Plow and Sand or Salt	65	150	Nil*	100 to 310
	Dry	Snow	Plow and Sand or Salt	65	150	Nil*	200 to 310
Below -12°C	Snow Packed	Nil	Plow and Sand	Nil	Nil	200 to 310	200 to 310
	Dry	Snow	Plow and Sand	Nil	Nil	200 to 310	200 to 310

* Section Manager or designate may change protocol at their discretion based on actual road and weather conditions

Table 3 – MTO Salt Application Rates

Precipitation	Road Surface Temperature Range (°C)		
	Warmer than -5	-5 to -10	-10 to -18
Frost	50	70	70
Light Snow	70	100	130
Heavy Snow	130	130	170
Freezing Rain	130	170	170

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