

# Winter maintenance salt treatment suggestions

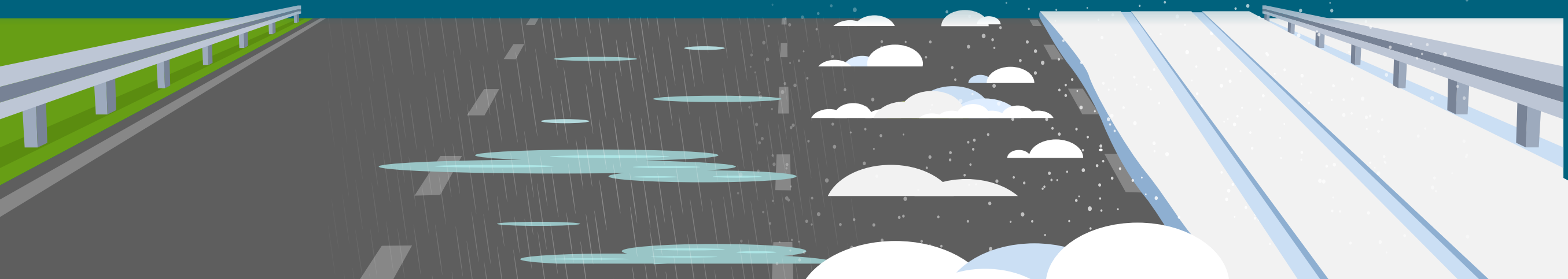
Grip and pavement temperature

The amount of road friction is a critical factor in determining how much salt to spread, but it doesn't tell the whole story.

Pavement temperatures hovering near the freezing point and other factors combine to inform winter road maintenance organizations and road authorities of how much material to spread in different areas.

Created by Mark DeVries, Business Application Manager at Vaisala and other road maintenance industry professionals, this winter road treatment matrix incorporates friction with other factors to provide material and amount guidance. It is intended as a starting point to use according to your organization's needs and Levels of Service.

When pavement temperatures drop to 15° F (-9° C) or below, many winter road maintenance organizations use alternative chemicals: Follow manufacturer's recommendations and your own policies. Treatment rates are suggestions based on two-hour cycle times while plowing and using pre-wetted salt. Using high volumes of liquids would reduce these rates. Vaisala accepts no responsibility or liability with respect to these suggestions, and winter road maintenance organizations should follow internal policies and Levels of Service.



Grip	.82 - .60	.50 - .60	.40 - .50	.40 - .45.	.30 - .40	<. 30
Pavemement temperature	30 – 34° F -1 – 1° C	25 – 32° F -4 – 0° C	20 – 25° F -7 – -4° C	15 – 20° F -9 – -7° C	15 – 20° F -9 – -7° C	< 15° F / -9° C
Roadway description	Dry to generally wet	Slushy to snow covered	Snow covered, perhaps wheel tracks	Snow covered, perhaps packed	Slippery, likely icy	Icy covered
Action: Rising pavement temperature	None	50 – 100 lbs/lnm 23 – 45 kg/lkm	100 – 150 lbs/lnm 45 – 68 kg/lkm	150 – 200 lbs/lnm 68 – 91 kg/lkm	200 – 300 lbs/lnm 91 – 136 kg/lkm	350 – 400 lbs/lnm 159 – 181 kg/lkm
Action: Falling pavement temperature	50 – 100 lbs/lnm 23 – 45 kg/lkm	100 – 150 lbs/lnm 45 – 68 kg/lkm	150 – 200 lbs/lnm 68 – 91 kg/lkm	250 – 300 lbs/lnm 113 – 136 kg/lkm	250 – 300 lbs/lnm 113 – 136 kg/lkm	400 lbs/lnm 181 kg/lkm

## Why Vaisala for road weather?

Vaisala road weather technology solutions lead the industry thanks to superior data qualities and a continuing commitment to innovation and R&D. They are built on 85 years of weather measurement experience and solutions, and trusted in over 170 countries from the north pole to the south pole and even on Mars.

Learn more about how to drive improvement in your winter road maintenance strategy.