Maintenance Fast Facts

VOLCANIC DESLICKING GRIT

Utah uses crushed volcanic CINDERS and FOAMED OBSIDIAN as traction aids. We also use crushed rock, screened sand, and expanded shale that meets our specifications. Collectively we call these materials DESLICKING GRIT.

We do not use crushed basalt or rhyolite. These materials are much heavier than cinders. Cinders and foamed obsidian are much lighter resulting in fewer broken windshield claims.

Deslicking grit has no ability to melt ice or snow. There may be a slight heat gain due to absorption of solar radiation, but this goes away at sundown. We mix deslicking grit with salt at a ratio of one part salt to one part grit by volume to form a product we call PREMIX.

Where temperatures are expected to fall below 5º F we use straight deslicking grit
Where temperatures are expected between 5º F and 20º F we use 1:1 premix.
Where temperatures are expected between 20º F and 32º F we use straight salt

When drifting is expected we plow and treat the road with grit only.

Deslicking grit tends to be scattered off the road by traffic. To counteract this and to help the grit penetrate snowpack and ice, we PRE-WET deslicking grit with salt brine or magnesium chloride at a rate of 7 gallons per lane-mile. The brine melts the ice around the grit particle and allows it to "burrow in".

We use corrosion-inhibited magnesium chloride and salt brine at 23% salt content. To reduce concrete damage and potential rusting we apply salt at measured rates using spreaders equipped with ground-speed controllers. Our standard application rate for salt is 250 lbs per lane mile.

A good reference work on anti-icing and winter pavement maintenance strategies is an FHWA manual entitled "MANUAL OF PRACTICE FOR AN EFFECTIVE ANTI-ICING PROGRAM"

Another source is the Snow and Ice Cooperative Pooled Fund Study (SICOP) website. The service is free and they have an excellent discussion mail list that attracts worldwide contributors. http://www.sicop.net/