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New de-icing road mixture: Magic Salt

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KEENE (AP) — The city Department of Public Works is trying a new technique to make roads safer this winter, using a solution that looks like coffee and smells like molasses: "Magic Salt."

The special concoction is designed to melt ice and snow faster and at lower temperatures than road salt, last longer on the road and be less corrosive. It's also biodegradable.

It's also less expensive. Salt costs \$40 a ton, said Bruce Tatro, Keene highway superintendent, and Keene uses about 5,000 tons per winter.

"Magic Salt" costs more, about \$62 a ton, but the city will probably only use about 2,200 tons, about \$64,000 less.

The experiment is a first for Keene and for the spraying company, N.H. Ice Melt of Manchester.

Tatro said Keene's road crews have already used the "magic salt" twice. "It really worked," he said. Scott Convery of N.H. Ice Melt said it's "like spraying Pam on a frying pan," like a no-stick spray for streets. So when plows clear off roads where the mixture has been used, there shouldn't be any hard-packed snow or black ice left over.

On Thursday, about 125 tons of regular road salt in the public works shed in Keene was hosed with a concoction called "Magic-0," a brown liquid that is half magnesium chloride and half throwaway products from, for example, a vodka manufacturing plant.

Magic-0 is sprayed onto regular salt heaps from a hose attached to a 220-gallon tank. The spray neutralizes the salts corrosiveness, and the mixture becomes like a brine.

Then it gets worked over until it's a cinnamon-brown color. Within 10 minutes, its ready to melt ice and snow in temperatures as low as 35 degrees below zero. That's at least 50 degrees colder than the temperature at which salt stops working.

Tatro said city crews usually would spread 800 pounds of regular salt on the roads in 25-degree weather. More salt must be spread when it gets down to 15 degrees. Beyond that, crews have to spread sand to keep the streets passable.

The magic salt "saves crews from being out at 2 a.m.," Tatro said. "When it's done ahead of time, we're not trying to play catch-up."