

Union melts snow like 'magic'

Pam Allen – The Daily Gazette
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A deicing solution tested on a section of Route 9 last winter appeared to minimize ice on the busy state roadway, and the chemical will be used again this winter to improve traffic safety, transportation officials said. The magnesium chloride spray was tested for the first time in the Capital Region in January. State road crews applied the treatment prior to several snowstorms, on Route 9 between the Crescent Bridge and Route 146.

"The preliminary results were satisfactory, and it performed as advertised, if you will. We see this as a bigger help early in the season, but we do intend to continue with the operation next year," said Robert Selover, associate director for the state Department of Transportation's maintenance division.

Ideally, the solution works best when the pavement is between 20 degrees and 36 degrees, and humidity is less than 50 percent, Selover said.

Since the applications on Route 9 didn't begin until January, when temperatures are typically colder than early winter, it was difficult to determine results based on ideal conditions, he said.

The treatment, which was shown to decrease icing when it was used in other parts of the state, is applied prior to a storm. Called "Magic-0," it inhibits ice from bonding to the pavement, and salt is then used on a regular schedule to keep the road clear.

DOT invested about \$14,000 for special spray equipment for the agency's operation out of Clifton Park. Maintenance superintendents there will decide which roads to treat next year, Selover said.

The solution costs DOT 84 cents a gallon, and it cost about \$500 each time the approximately four-mile stretch of Route 9 was treated, DOT officials said.

It's hard to measure the actual success of the material because factors such as traffic counts and accident rates can vary considerably from winter to winter.

"When you look at wintertime, I'm not sure you can measure anything that means anything. But the level of service should improve because the road is easier to navigate," Selover said.

Brennan Landscaping Inc. in Schenectady is the Capital District's sole distributor for "Magic-O" and "Magic Salt."

Company owner Tim Brennan said he used "Magic-0," the spray form of the solution, for the first time last winter to spray salt piles at a half-dozen local businesses, including Union College, St. Peter's Hospital and Time Warner-Cable.

"This is catching on like wildfire," said Brennan, who also retails both products from his business at 1100 Erie Boulevard.

Brennan said he is especially fond of the products because they are water soluble, and approved by the state Department of Conservation as being environmentally sensitive.

Unlike the spray solution alone, which can develop a greasy film when applied on frozen concrete, a combination of salt and the magnesium chloride solution can be used in below freezing temperatures, Brennan said.

The mixture is more effective because oil is less apt to settle on concrete when it is attached to a carrier, he said.

Officials at Union College said they used the solution for the first time this past winter, and plan to use it again next year.

"Overall, it worked great," college spokeswoman Lisa Stratton said.

She said the magnesium chloride solution, which was sprayed on piles of salt prior to its application, was more expensive than the school's traditional salt treatment, but had several attractive environmental and long term money-saving benefits.

The school's salt usage was reduced considerably, which helps increase the life of the campus plants, and the solution is non-corrosive, which means it does not damage sensitive wildlife, and could add as many as two or three years to the life of the college's snow-removal equipment, Stratton said.

Brennan said the product cuts normal rock salt use by 30 to 50 percent.