

## DEICERS/CHEMICALS

### Boost salt brine enhancer inhibitor (EnviroTech)

<http://envirotechservices.com/deicing-anti-icing/salt-brine-additives/boostsb/>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
Idaho	4000 gallons	2016-2017	5	5	5	N/A	5	5
<b>Average rating</b>			5 - extremely helpful	5 - extremely easy	5 - extremely helpful	N/A	5 - extremely well	5 - extremely satisfied

#### Comments

Idaho DOT (2016-2017) • Overall rating: 5

Boost was effective at various concentrations and reduced the number of applications on the roadway. The use of Boost helped maintain the salt brine mixed with Boost at colder temperatures and worked better at staying on the road longer.

### Dowflake Xtra calcium chloride flakes

<https://www.oxycalciumchloride.com/products/dowflake-xtra-83-87-calcium-chloride-flakes>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
Arizona	N/A	2017-2018	5	5	N/A	N/A	5	5
<b>Average rating</b>			5 - extremely helpful	5 - extremely easy	5 - extremely helpful	N/A	5 - extremely well	5 - extremely satisfied

#### Comments

Arizona DOT (2017-2018) • Overall rating: 5

Comments from Flagstaff Supervisor: They typically use this when temperatures are extremely low and material is not working as fast as needed. They will pre-make loads prior to the storm. This helps with ensuring it is mixed and ready to go in case they need it. It is typically mixed one 50-pound bag to a front end loader bucket full of Ice Slicer. They will usually use it for 3-4 loads per storm (when needed). They stated this stuff works extremely fast with breaking up the ice and is very corrosive.

### Fusion Deicer

<https://eco-solutions.net/fusion-liquid-de-icer/>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
Iowa	3,600	2008-09	4	4	4	3	3	3
Illinois	8,000	2008-09	n/a	n/a	3	4	4	4
<b>Average rating</b>			4 - helpful	4 - easy	3.5 - helpful	3.5 - maintained good condition	3.5 - well	3.5 - satisfied

#### Comments

Illinois DOT (2008-2009) • Overall rating: 4

It's still too early to tell if this is an alternative to salt brine.

## Geomelt

<https://cpiroadsolutions.com/product/geomelt/>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
Illinois	14,568 gallons	2008-09	n/a	n/a	n/a	n/a	3	3
Illinois	8,000 gallons	2007-08	n/a	n/a	5	n/a	3	3
Missouri	8,000 gallons	2008-09	5	4	5	5	5	5
Missouri	12,000 gallons	2007-08	5	3	4	5	5	5
Missouri	10,000 gallons	2007-08	4	3	5	4	4	4
Missouri	20,000 gallons	2007-08	3	4	4	4	4	4
Ohio		2007-08	2	4	5	3	2	3
Ohio	12,000 gallons	2007-08	4	3	5	3	3	3
Ohio	1,000 gallons	2007-08	4	5	4	4	3	4
Ohio	1,971 gallons	2007-08	4	4	3	3	2	2
<b>Average rating</b>			<b>3.9 - helpful</b>	<b>3.8 - easy</b>	<b>4.4 - helpful</b>	<b>3.9 - maintained good condition</b>	<b>3.4 - average</b>	<b>3.6 - satisfied</b>

### Comments

#### Illinois DOT (2007-2008) • Overall rating: 3

IDOT will continue to evaluate the product. The chemical was mixed with salt brine and used to prewet granular salt. The operators reported that roads cleaned up faster when using this product. No formal evaluation has been performed by IDOT.

#### Missouri DOT (2008-2009) • Overall rating: 5

Employees thought product performed good as Calcium if not better. End of shift leather gloves still fit. Thought they might had one to two more cycle times than crew on either side. Load salt and GO.

#### Missouri DOT (2007-2008) • Overall ratings: 5, 4, 4

- The lumping or hardening of our salt was practically eliminated. The lumps easily broke up in the loading process. Very good results.
- I am sold on Beet Juice. It performs very well under the stated conditions of lower temps. It took a little reworking of our delivery systems. We will incorporate more stations that use beet juice in Eastern Jackson Co.
- Geomelt performs exceptionally well as an anti-caking agent. Stockpiles treated with Geomelt have remained free flowing. Initial reports on its effectiveness as an anti-icing agent are inconclusive. We plan on conducting a more indepth evaluation during the 2008-09 winter.

#### Ohio DOT (2007-2008) • Overall ratings: 3, 3, 4, 2

- Best thing about Geomelt was not having to use grits when applying this product
- We did not have consistency with the product. The drivers had a hard time with the theory of plowing the road and not re applying materials. We could not show the additional cost as a benefit. Keep in mind this was using the product on the salt as a treated pile.
- Longer to react but results last longer for pavement. Takes less material to treat highway. Not as effective below 20. Suggest treating initially with salt and then geomelt mixture.
- Did not use enough to really know.

## IceBan (Scotwood Industries)

<https://scotwoodindustries.com/product/iceban/>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
Missouri	750 gallons	2014-2016	4	4	4	5	4	4
<b>Average rating</b>			4 - helpful	4 - easy	4 - helpful	5 - maintained excellent condition	4 - well	4 - satisfied

### Comments

Missouri DOT (2014-2016) • Overall rating: 4

The testing we performed in 2015-2016 looks promising and in the testing we put Ice-Ban up against our normal winter de-icing products. We did see a reduction in salt usage and we decided to expand the testing this year with 12,000 gallons of the Ice-Ban product.

## IceKicker (Saltworx)

<http://saltworx.net/icekicker.html>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
Idaho	N/A	2016-2017	4	4	4	N/A	4	4
<b>Average rating</b>			4 - helpful	4 - easy	4 - helpful	N/A	4 - well	4 - satisfied

### Comments

Idaho DOT (2016-2017) • Overall rating: 4

Ice Kicker was a good product and we used less per lane mile than regular salt.

## Ice Slicer deicer

<http://www.iceslicer.com/>

State	Quantity tested	Season tested	Instructions	Ease of installation	Vendor support	Durability	Addressed problem	Overall satisfaction
South Dakota	12 semi loads at 30 tons per load	2015-2017	5	5	5	5	5	5
<b>Average rating</b>			5 - extremely helpful	5 - extremely easy	5 - extremely helpful	5 - maintained excellent condition	5 - extremely well	5 - extremely satisfied