

The Technology of Ice Melters

This should be simple, it's ice melter! Throw it on the ice and the ice melts, right? As you can guess, it is not that simple. In a world where someone slipping and falling on a patch of ice is a pending lawsuit, it is important to select the right ice melter for the job or situation.

We stock nine different types of products as ice melters. Some are straight products and others are mixes, each to fit a specific need or market niche.

Rock Salt (Halite)

The most common and least expensive ice melter. It is sodium chloride and can cause serious damage to plants. "Salt damage" is common along roads and sidewalks where rock salt has been spread. It can also cause pitting or flaking of concrete. It will effectively melt ice to +10° F.

Potassium Chloride (Majic Melt/FS Ice Melt)

Also known as white potash. It causes less damage to vegetation than rock salt, but does not work as temperatures go down. It will effectively melt ice to +20° F.

Urea

Used primarily as a fertilizer for supplying nitrogen to plants. It usually causes very little damage to vegetation, but can at very high rates. A strong selling point for urea is that it is non-corrosive. Urea is effective to +15° F.

Magnesium Chloride (Freez Gard/Absolute Zero)

A very effective ice melter, as minimum temperatures go down. It will effectively melt ice to -22° F.

Calcium Chloride

The most effective straight product, but is one of the more expensive products. Sold as a pellet (Peladow) or flake (Dowflake), it effectively melts ice to -25° F.

Titan/Titan Blue

A four way blend of calcium, magnesium, sodium and potassium chloride is a very effective and economic ice melter. Titan Blue has a dye to help see the spread pattern. This blend is effective to 0° F.

Eco-Melt

A three way blend of sodium, calcium and magnesium chloride with Activar®. Activar® is a patented agent that accelerates the conversion of dry ice-melting salts to a melting brine. It offers added effectiveness at a slightly higher cost. It effectively melts ice to -5° F.

Triple Melt

A three-way blend of sodium, calcium, and magnesium chloride. The ratio of each ingredient is different than Eco-Melt giving this product improved melting capability. Triple Melt is effective to -15° F.

Landscape

A premium ice melter with minimal impact on vegetation. It is a blend of encapsulated urea with calcium chloride. Landscape will effectively melt ice to -25° F.

| Product name | Active Ingredient | Effective Melting Temperature | Price Per Bag |
|---------------------------|-----------------------------|-------------------------------|---------------|
| Majic Melt/ FS Ice Melt | Potassium chloride | + 20° | |
| Urea | Urea | + 15° | |
| Halite | Sodium chloride | + 10° | |
| Titan/Titan Blue | Cal/mag/pot/sod chloride | 0° | |
| Eco-Melt | Sod/cal/mag chloride | - 5° | |
| Triple Melt | Sod/cal/mag chloride | - 15° | |
| Freez Gard/ Absolute Zero | Magnesium chloride | - 22° | |
| Peladow/Dowflake | Calcium chloride | - 25° | |
| Landscape | Encap. urea w/cal. chloride | - 25° | |