

# Deicing

## Environmentally-sound deicing solutions with enhanced corrosion protection

**B**ioAmber's patented biobased succinate salts derived from biosuccinic acid are leading the field in alternative deicing and anti-icing applications, providing performance and cost similar to that of traditional materials but with an improved environmental footprint and impact profile in terms of corrosion, material degradation etc.

A new generation of deicing products is now available with a dramatically-improved corrosion profile on both alloys and concrete, and an equally impressive reduction in the carbon brake oxidation of aircraft. These advantages are combined with a lesser environmental impact, meaning the end-user is reassured that they have made a more sustainable choice.

### Improved Corrosion Profile

Potassium and sodium succinate have a significantly better corrosion profile than potassium acetate, potassium formate or brine, meaning reduced corrosion of alloys, coated metals and uncoated metals. Concrete too is protected from damage.

### Biobased, Reduced Carbon Footprint

Succinate deicing solutions are biobased and renewable as they are made from fermentation of plant materials, using large quantities of CO<sub>2</sub> in production and are less affected by fluctuations in oil prices.

### Equivalent Deicing Performance

BioAmber's deicing materials demonstrate excellent ice-melting and ice penetration properties, reducing the freezing point to -19°C in a 25% solution with water.

### Strong Patent Protection

We hold a portfolio of patents covering the production and use of succinate salts as deicing solutions and their synergistic effect on the freezing point.

### Competitive Price

Succinate-based deicing solutions are cost-competitive with current deicing solutions, given the full cost of deicing products.



To learn more about how BioAmber's products could help your business, visit [www.bio-amber.com](http://www.bio-amber.com)



BioAmber is a renewable chemistry company, leading the field in biobased succinic acid. BioAmber's new product platform creates a foundation for customer innovation in a broad range of applications and markets, where biobased succinic acid is cost-competitive and offers superior functionality and performance with a better environmental footprint.