



 **BASF**

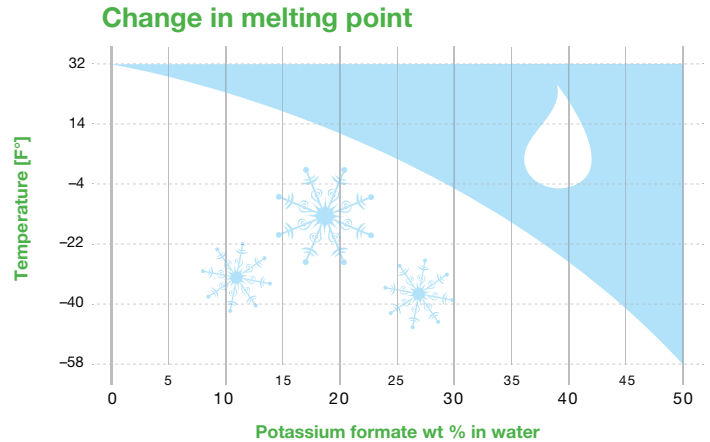
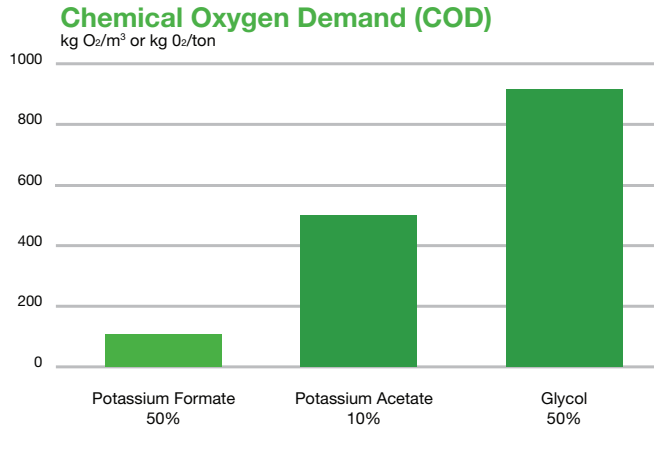
We create chemistry

## Runways love chemistry.

BASF is focused on helping airports meet the demands of runway deicing in an environmentally responsible way with potassium formate. Find out how BASF can help sponsor a trial evaluation and join the growing list of airports that have approved Alpine RF-14F.®

# NASi and BASF have changed the deicing landscape in North America with formates!

Airports in the northern US and Canada often experience significant snowfall, yet they need to be operational during winter storm activity to keep aircraft (and passengers) moving. Runway deicing fluids (RDF) are used to clear runways and taxiways. In North America, RDFs are primarily potassium acetate-based. However, airports in Europe have chosen liquid potassium formate, a derivative of formic acid, 2 to 1 over potassium acetate for runway deicing, both for its environmental profile as well as its overall efficiency. BASF's formic acid is made proudly in Louisiana which now allows North American airports the same affordable and environmentally compatible option for runway deicing through our partners at NASi.



Formates, the salts of formic acid, have approximately 1/3 the chemical oxygen demand (COD) of acetates, making it easier on lakes, rivers and streams – often an airport's closest neighbor. Since collection is not practical other than with storm water runoff, formates also reduce waste water treatment costs, leading to lower airport maintenance costs.

Formates are effective! Formates make sure that water does not freeze at 32° F as it usually does. Depending on the concentration of the formate, the freezing point is reduced to as much as -58° F and is then much lower than the outdoor temperature. By this mechanism, formates rapidly remove thin layers of ice and effectively prevent a new layer of ice from forming on the landing strip.

“ Since partnering with BASF on a trial of Potassium Formate in 2015, MMU has been an exclusive user of the product. It has performed very effectively in multiple types of conditions as compared to our past experiences. We also believe it to be a better choice for the environment, which is important the Airport and its users. ”

Darren S. Large A.A.E.  
Director, Facilities & Operations



Morristown Municipal Airport, recognized for its award winning performance in snow and ice control, is an active user of Alpine RF-14F liquid deicer, which is approved under AMS 1435 for airfield runways.

Learn how formates can work for your airport runway deicing needs at [www.basf.us/runways](http://www.basf.us/runways) or contact us directly [na-formicacid@basf.com](mailto:na-formicacid@basf.com).

