



Rising Cost of Runway Pavement Deicer and the Affect on our Member Airports

In late July, we began to hear reports of a possible shortage of runway deicers in the upcoming winter season. Due to requests from several different member airports we created a survey and distributed it to the ACI-NA Operations and Technical Affairs committee. We received 26 responses between August 5 and August 29, 2008.

Overall, the survey showed that this coming winter season, the majority of airports will be faced with significantly higher costs for Potassium Acetate, one of the most likely substances an airport would use to deice a runway¹. Of 18 responses² we are seeing an average increase of 186% in the price of potassium acetate; one respondent reported as much as 362% increase in their price. Our respondents will be paying anywhere from \$3.00/gallon to as much as \$8.29/gallon. Furthermore, more than half of our respondents will be paying more than \$6.00/gallon in this upcoming winter season. Not only is the price rising but several airports have reported that a shortage of potassium acetate is a very real scenario.

Several factors are influencing these shortages and higher prices. First, the two primary raw materials in potassium acetate are potassium hydroxide and acetic acid; both have seen a dramatic increase in price in the last year. Second, the higher cost of oil affects everything from production costs to transportation.

Runway pavement deicer is a crucial element in maintaining a safe and operational airport in the winter season. Airports will need to discuss their options with their airline tenants. Carriers may well place enough importance on continuing traditional deicing practices to want to pay the dramatically increased costs. However, they need to understand that, if deicer usage is reduced, it will have negative effects on their ability to successfully complete certain winter operations. With less deicing fluid used, there may be more occasions where runways will be closed to maintain safety, either because of PIREPS of NIL braking or to perform additional mechanical runway surface maintenance operations, and there will be a resultant increase in diversions and cancellations. Given the increased focus the industry is placing on maintaining sufficiently high margins of

¹ Our survey did ask the airports for any information on the increase in the price of Ethylene Glycol and Propylene Glycol but every airport that answered those questions added that they do not purchase either product. Due to this, the summary will focus on the increased price of Potassium Acetate.

² Only 18 airports answered this specific question. The number of responses is stated for each pertinent question.

safety during operations on winter contaminants, it is clear that operational efficiency, not safety, will have to yield if use of these deicing materials is reduced.

To support this short brief please see below for a sample of responses to several key questions in our survey:

Have you had any indication that there will be a shortage of Potassium Acetate?

- We have been informed by our current contracted vendor that wholesale prices of potassium hydroxide and acetic acid have increased dramatically, associated with high, world-wide demand for those products. Additionally, raw material suppliers have claimed force majeure due to mining problems.
- Our supplier has provided information about raw material shortages which have led to higher prices and the potential for shortages for "non contract" customers.
- Some vendors are not quoting due to shortage. Others, the quotes are good for 30 days only.
- The price is off the chart. Supplier's are even making the statement "buy now or it may not be available" later.
- Our vendor from last year indicated there is the very real possibility that shortage may be seen due to shortages in raw materials.
- Our supplier has stated that due to shortage and cost increase in raw materials, the market will be 40% short of capacity this season and pricing will increase as much as 300% from last season
- I was notified by my Potassium Acetate provider that the raw materials to make the chemical has increased in price and may effect some winter airports.

Additional Comments.

- After our three-year contract expires this upcoming winter we expect to be paying at least \$5/gallon and over \$2,500/MT for the solid deicer under any new agreement.
- For both deicing chemical Potassium Acetate and Sodium Formate, should the company fail to provide what is ordered, we have the option of finding other suppliers and then back bill the requirement contracted company that failed to meet its obligation.
- As we use urea for deicing pavement surfaces we are seeing dramatic increases in price of this commodity. Cost in 2007-2008 season: \$340/T, cost estimates for 2008-2009 season range from \$850-1000/T. This has greatly shifted our budget forcing us to leave employment positions open, and to delay non-AIP capital projects.
- We have received proposals for similar percentage price increases for sodium acetate solid deicer.

Any questions or comments regarding this survey can be directed to Matt Griffin at mgriffin@aci-na.org or (202) 293-8500.