

TECHNICAL DATA SHEET

GEN2 RUNWAY DEICING FLUID

Description

GEN2 runway deicing fluid is a $\geq 50\%$ by weight aqueous potassium acetate solution with corrosion inhibitors, formulated to meet the material compatibility requirements of AMS 1435. It is delivered ready to use in bulk, IBCs or 20 litre containers.

Application Rates

ANTI-ICING

The most cost effective use of deicing chemicals is to apply conservatively before the onset of snow and ice conditions, slowing the accumulation of frozen precipitation and preventing it from bonding to the surface.

Typical deployment: 20g /m².

DEICING

Ploughing and sweeping accumulated snow from the surface before the application of GEN2 ensures maximum chemical performance and minimum fluid usage. Residue precipitation dilutes the chemical and renders it less effective, necessitating additional applications.

Typical deployment: 30g / m²

FREEZING RAIN

After weather events in which a thick layer of ice has formed, it is recommended to use a solid pellet deicing chemical in addition to a fluid. In these extreme circumstances the primary purpose of the deicing fluid is not to melt surface ice but to flow down bore holes made by the pellets and diffuse

beneath the ice to loosen it from the surface and allow its easy mechanical removal. When using a solid deicer, such as LNT Airside Solid, better melting efficiency and adhesion occurs if the pellets are prewetted.

Spray Rigs

Standard liquid spraying units and nozzles can be used. The viscosity of GEN2 remains virtually unchanged as its temperature falls.

Storage and Handling

Storage tanks are recommended to be of stainless steel, fibreglass, reinforced plastic or mild steel coated with a protective liner. Clean and inspect equipment before and after the winter season

Specifications

Appearance	Clear liquid
Colour	Water White to Dark Straw
Freeze Point	$\leq -60^{\circ}\text{C}$
Specific Gravity	1.26 – 1.31 @ 20°C
pH	9.5 – 11.5
Viscosity	$\leq 20\text{cP}@0^{\circ}\text{C}$
Flash Point	Non flammable
Miscibility	Complete

Safety and the Environment

GEN2 is readily biodegradable and has low oxygen demand / aquatic toxicity.

Guideline Application Rates

GEN2	Dry Conditions Ice thickness < 1mm Light Frost		Wet Conditions Ice thickness < 1mm Heavy Frost		Wet Conditions Snow Packed snow		Wet Conditions Freezing rain Ice thickness 1-3mm	
	Anti-icing	De-icing	Anti-icing	De-icing	Anti-icing	De-icing	Anti-icing	De-icing
Temperature (°C)								
0 to -5	10-20 g / m ²	15-25 g / m ²	15-25 g / m ²	25-35 g / m ²	25-35 g / m ²	35-45 g / m ²	25-35 g / m ²	35-45 g / m ²
-5 to -10	15-25 g / m ²	25-35 g / m ²	25-35 g / m ²	35-45 g / m ²	35-45 g / m ²	45-55 g / m ²	35-45 g / m ²	45-55 g / m ²
-10 to -15	20-30 g / m ²	30-40 g / m ²	35-45 g / m ²	45-55 g / m ²	45-55 g / m ²	55-65 g / m ²	45-55 g / m ²	55-65 g / m ²