



provifrost

a proviron brand



Provifrost[®] **NF**

High performance solid de-icer

Provifrost[®] **NF** is a high performance solid de-icer for airport runways, taxiways and aprons. It is a minimum 97% sodium formate with corrosion inhibitors. Provifrost[®] **NF** contains no chlorides, has excellent melting properties and is active at low temperatures (-18°C).



Provifrost® NF specifications		
	Value	Unit
Bulk density	0,90 – 0,95	g/cm ³
pH in a 15% solution	9,5 to 12,5	
Shape	Irregular granulate	

Storage and Handling

Provifrost® NF works fast because it quickly absorbs water. Packaged product should be kept indoors in a dry environment, in its original packaging until use. Foresee adequate ventilation.

Provifrost® NF may be applied with existing solid de-icer spreading equipment. Spreaders should be calibrated for accurate application. Do not store loaded spreading equipment outside.

Like any solid de-icer, excessive handling may cause dustiness. Wear suitable protective clothing (safety glasses with side shields and rubber gloves).

Environmental and toxicology information

Tests have been performed according to the latest AMS1431 standard by Scientific Material International (SMI).

	Value	Unit
BOD ₅	0,20	kg O ₂ /kg
COD	0,22	kg O ₂ /kg
Acute Toxicity to Daphnia Magna – 48 hours LC50	4125	mg/L
Acute Toxicity to Fish – 96h/LC50	5250	mg/L

Application

Provifrost® NF can be used as both anti-icer and de-icer. Suggested application rates can be found in the below table. One must however consider factors like surface material, surface structure, ambient temperature and the quantity and quality of the ice pack. Careful monitoring of the weather conditions as well as consulting records

of past events will provide you with a lead on upcoming bad weather and guide you in preventive application of the product.

Pre-wetting

Provifrost® NF is most effective as a de-icer when pre-wet at the spreader spinner with a liquid de-icer (**Provifrost® KF ECO**). Begin at 10% liquid de-icer by weight **Provifrost® NF** and adjust for local conditions.

Anti-icing

Apply just as the storm event begins. With a small amount of precipitation on the surface – freezing rain, ice or snow – **Provifrost® NF** will activate and keep ice bonds from forming at the surface. This anti-icing strategy is an effective addition to liquid anti-icing during freezing rain conditions.

De-icing

Our advice is to treat the surface mechanically before applying **Provifrost® NF**. **Provifrost® NF** may be used in conjunction with a liquid de-icer (**Provifrost® KF ECO**) to solve serious pack conditions. First apply **Provifrost® NF** to the pack. After holes are punched in the pack, apply the liquid de-icer. The liquid then has a path to the surface and quickly breaks the pack prior to further mechanical removal.

The table below must be looked at as a guideline and not as a recommended dosage. Proviron Industries will gladly further advise you on the use and application of this de-icer.

	Frost/Ice (Up to 1 mm)	Snow/Ice (1 to 3 mm)
Pavement Temperature (°C)	g/m ²	g/m ²
0 to -5	10-20	25-40
-5 to -10	20-30	40-50