

D-ICE

RUNWAY DE-ICING SOLUTIONS



NCF

ABOUT

Nordix Chemicals Factory LLC is a modern high-technology company of chemical industry of Europe (production facilities - Croatia, Zagreb).

The specialization of NCF is R&D and production of chemicals for different sectors of economic.

Among others the main products of NCF:

- Liquid runway de-icers;
- Solid runway de-icers;
- Aircraft deicing fluids;
- Polymer dispersions ;
- Thermostating liquids;
- Others

The specially designed composition of all D-ICE DE-/ANTI-ICERS ensures that the corrosion of materials used in aircraft construction is reduced to a minimum. D-ICE RUNWAY DE-/ANTI-ICERS meet the requirements of the internationally recognized Aerospace Material Specification AMS 1431 and AMS 1435 for solid and liquid De-/Anti-Icers. Certificates awarded by the independent Scientific Material International Inc., USA (SMI) recognize the compatibility of D-ICE De-/Anti-Icers with various metals and polymer materials.

To obtain maximum effectiveness of D-ICE products in Anti-Icing, it is advisable to apply the product shortly before the expected freezing precipitation will occur. For the most economical use of D-ICE products in De-Icing, the aim should generally be to apply sufficient quantities just to penetrate the ice and the packed snow layers from the runway, turn into slush, and then remove with mechanical snow-clearing equipment. For this purpose, it is advantageous to use the liquid D-ICE KA and D-ICE KF in combination with the solid D-ICE NF.

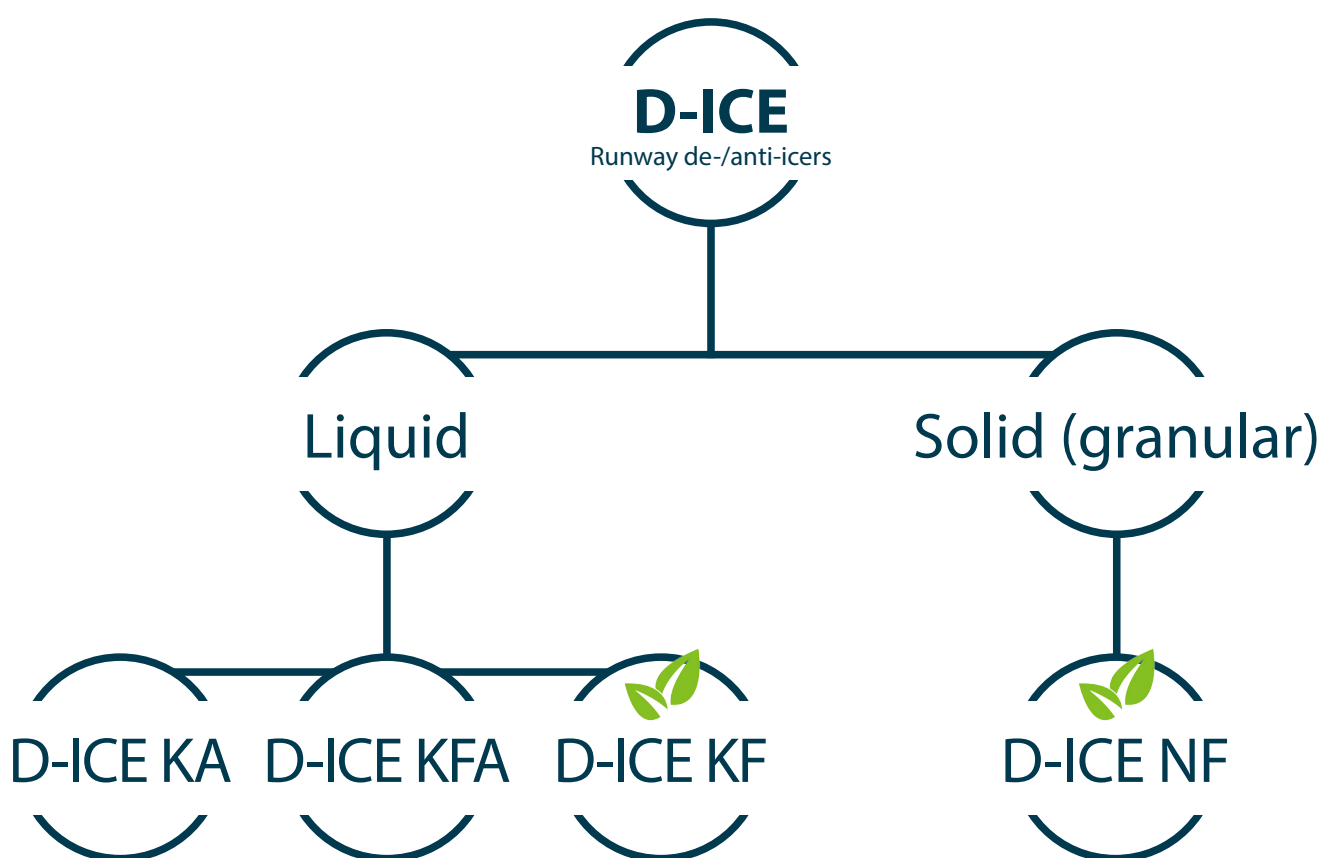


Scientific Material
International



RUNWAY DE-/ANTI-ICERS

D-ICE® - efficient way of Runway De-/Anti-icing. De-Icing is the removal of snow, frost and ice from surface. The prevention of snow and ice build-up (Anti-Icing) and their (De-Icing) from airfields (runways, taxiways, and roadways) is essential for flight safety.



Advantages



Ready biodegradability

Completely soluble product.
Solubility within 48 hours.



Efficiency → Economy

The two-stage use of liquid and granular reagents D-ICE® increases the efficiency and saves the costs of airports.



Safety

Does not cause corrosion of structural elements of aircraft and cement-concrete surfaces.



Ecological performance

D-ICE® products have high ecological properties and do not harm the environment.

NCF Customer Support Center

At the request of the client, NCF technical specialists analyze the effectiveness of winter maintenance of enterprises and formulate proposals for optimizing the use of reagents, storage facilities and reducing costs.

D-ICE®-KA

Liquid Runway/Taxiway and Parking Apron De-icer based on potassium acetate

PRODUCT DESCRIPTION

D-ICE®-KA is a liquid runway, taxiway and parking apron de-icer based on potassium acetate. This is easy applicable, fully biodegradable and environmentally friendly de-/anti-icing product combined with unique formulation of corrosion inhibitors. De-icer is tailored to completely fulfill SAE AMS 1435 standard requirements and is regularly revised/retested according the latest version of the standard at SMI Inc. laboratory. D-ICE®-KA performs by decreasing the freezing temperature of water and creates long lasting protection from snow, ice, freezing rain and slush.

PROPERTIES

Potassium Acetate, %	50.0
Shape	Fluid
Appearance	Light fluid
pH value	7.0 – 11.5
Freezing point (fluid diluted 1:1)	- 15
BOD5	0,20 kg O2/kg liquid
COD	0,31 kg O2/kg liquid
AQUATIC TOXICITY:	1,8
Acute Toxicity to Daphnia Magna	48 hour LC50: 725 mg/l
Acute Toxicity to Fish	96 hour LC50: 2,125 mg/l

PERFORMANCE	CERTIFICATION
D-ICE KA can be applied directly onto the pavement surface where is desirable both preventive and/or reactive treatment. Product does not cause any corrosion to metals and is FREE OF: • Chlorides • Phosphates • Nitrites and nitrates • Triazoles.	• D-ICE KA is certified and approved by the latest version of SAE AMS 1435 standard at SMI Inc. •

D-ICE®-KFA

Liquid Runway/Taxiway and Parking Apron De-icer based on **potassium formate and acetate**

PRODUCT DESCRIPTION

D-ICE®-KFA is a liquid runway, taxiway and parking apron de-icer based on potassium formate and acetate. This is easy applicable, fully biodegradable and environmentally friendly de-/anti-icing product combined with unique formulation of HOAT corrosion inhibitors. De-icer is tailored to completely fulfill SAE AMS 1435 standard requirements and is regularly revised/retested according the latest version of the standard at SMI Inc. laboratory. D-ICE®-KFA performs by decreasing the freezing temperature of water and creates long lasting protection from snow, ice, freezing rain and slush.

PROPERTIES

Potassium Formate , % / Potassium Actetate , %	25.0 / 23.0-25.0
Shape	Fluid
Appearance	Light fluid
pH value	7.0 – 11.5
Freezing point (fluid diluted 1:1)	- 15
BOD5	0,03 kg O2/kg fluid
COD	0,20 kg O2/kg fluid
AQUATIC TOXICITY:	
Acute Toxicity to Daphnia Magna	48 hour LC50: 1,275 mg/l
Acute Toxicity to Fish	96 hour LC50: 2,150 mg/l

PERFORMANCE	CERTIFICATION
D-ICE KFA can be applied directly onto the pavement surface where is desirable both preventive and/or reactive treatment. Product does not cause any corrosion to metals and is FREE OF: • Chlorides • Phosphates • Nitrites and nitrates • Triazoles.	• D-ICE KFA is certified and approved by the latest version of SAE AMS 1435 standard at SMI Inc.



Liquid Runway/Taxiway and Parking Apron De-icer based on **potassium formate**

PRODUCT DESCRIPTION

D-ICE®-KF is a liquid runway, taxiway and parking apron de-icer based on potassium formate. This is easy applicable, fully biodegradable and environmentally friendly de-/anti-icing product combined with unique formulation of corrosion inhibitors. De-icer is tailored to completely fulfill SAE AMS 1435 standard requirements and is regularly revised/retested according the latest version of the standard at SMI Inc. laboratory. D-ICE®-KF performs by decreasing the freezing temperature of water and creates long lasting protection from snow, ice, freezing rain and slush.

PROPERTIES

Potassium Formate , %	50.0
Shape	Fluid
Appearance	Light fluid
pH value	7.0 – 11.5
Freezing temperature (fluid deluted 1:1)	- 15
BOD5	0,03 kg O2/kg fluid
COD	0,11 kg O2/kg fluid
AQUATIC TOXICITY:	
Acute Toxicity to Daphnia Magna	48 hour LC50: 1,250 mg/l
Acute Toxicity to Fish	96 hour LC50: 2,125 mg/l

PERFORMANCE	CERTIFICATION
D-ICE KF can be applied directly onto the pavement surface where is desirable both preventive and/or reactive treatment. Product does not cause any corrosion to metals and is FREE OF: • Chlorides • Phosphates • Nitrites and nitrates • Triazoles.	• D-ICE KF is certified and approved by the latest version of SAE AMS 1435 standard at SMI Inc.



D-ICE NF

Solid (Granular) Runway/Taxiway and Parking Apron De-icer based on sodium formate

PRODUCT DESCRIPTION

D-ICE®-NF is a Solid (Granular) runway, taxiway and parking apron de-icer based on potassium formate. This is easy applicable, fully biodegradable and environmentally friendly de-/anti-icing product combined with unique formulation of corrosion inhibitors. De-icer is tailored to completely fulfill SAE AMS 1435 standard requirements and is regularly revised/retested according the latest version of the standard at SMI Inc. laboratory.

PROPERTIES

Sodium Formate , %	98.0
Active agent	Sodium formate
Appearance	Granular
The pH at 20°C, g/cm ³	8.00 – 11.00
Grain composition, mass fraction of practice of particle size, %:	
Above 4 mm, but less than 10 mm	2
From 1 mm to 4 mm	93
Less than 1 mm	5
Bulk density at 20°C, g/cm ³	0,85-1,0
Granular strength, kg/cm ²	20-40
Biochemical O2 consumption (BOD5) mg/g	100

PERFORMANCE	CERTIFICATION
D-ICE NF can be applied directly onto the pavement surface where is desirable reactive treatment. Product does not cause any corrosion to metals and is FREE OF: • Chlorides • Phosphates • Nitrites and nitrates • Triazoles.	• D-ICE NF is certified and approved by the latest version of SAE AMS 1435 standard at SMI Inc.

NORDIX CHEMICALS FACTORY d.o.o.

Radnička cesta 173L,
10000, Zagreb, CROATIA

+385 91 6173 798
+385 99 3000 087

v.vasilchenko@ncf.hr (Vladislav Vasilchenko - Head of commerce)
a.karayama@ncf.hr (Anton Karayama - Sales and logistics)

www.ncf.hr

