

Green Chemistry

AVIFORM[®]



- for de-icing and anti-icing
- no nitrogen salts
- fully biodegradable

AVIFORM – Pavement Deicing Agents

Aviform® pavement deicing agents are products based on the salts of formic acid. Aviform® L50 is a fluid based on 50 w/w-% potassium formate and Aviform® S Solid is a granular with at least 97 w/w-% sodium formate. Both products show high performance as de- and anti-icing chemicals.

Both Aviform® products contain an especially designed corrosion inhibitor package and performance chemicals to meet and exceed the latest specifications of international standards like SAE AMS 1435 and AMS 1431. They were designed to obtain maximum friction and to support mechanical cleaning to enable users to maintain safe winter operations for landing, take-off and taxi operations.

Aviform® products have lowest impact on materials used in airframe construction and on equipment used in airport operation. They are safe to use for humans and have no toxicity effects on animals and aquatic life.

Aviform® products were also designed to help protect the environment. Due to their fast and complete biodegradability even at low temperatures with the lowest oxygen consumption during biodegradation Aviform® products have the lowest impact on waste water streams and minimize costs for sewage treatment. In addition, because of their high efficiency the use of Aviform® products reduces the overall usage of total deicing chemical volumes and thus helps minimize costs and the environmental impact.

Aviform® L50 is mostly used as an anti-icing chemical to prevent the formation of ice and frozen deposits such as snow on surfaces due to its ability to prevent the bonding between the surface and the frozen particles. Furthermore Aviform® L50 has a very low freezing point so that it can absorb and melt frozen precipitation and protect surfaces.

Aviform® S Solid is mostly used as a de-icing chemical or together with Aviform® L50 as an extremely effective anti-icing mixture. Aviform® S Solid has a strong ice breaking capability by penetrating through and undercutting ice layers to facilitate mechanical cleaning.



Certified by:



Reliable Action – Reliable Service

Besides a great product performance the key factor to successful winter operations is a secure and on time supply of deicing agents.

Aviform® products are produced and stored in logistically ideal locations and can be ordered 24/7 through the whole winter season with extremely short lead times. Due to our production (more than 800 tons per day) and storage capacities (up to 10000 tons for Europe) we can manage peak demands in short times to great satisfaction of our customers. Our careful selection of trusted and reliable hauliers ensures on time deliveries even under heavy winter conditions. Our impressive list of references makes ADDCON the number one choice for large and small airports in Europe!



AVIFORM[®] L50



Composition	Approx. 50 w/w-% potassium formate with corrosion Inhibitors and water
Corrosion Inhibitors	< 1 w/w-% of total
Appearance	Clear, odorless and colorless liquid
Density (20 °C)	1330 - 1370 kg/m ³
Viscosity (0 °C)	5 mPas
Viscosity (25 °C)	3 mPas
Flash Point	> 100 °C
Freeze Point	< -50 °C
pH (20 °C)	typical 10.9 – 11.4



AVIFORM[®] S-Solid



Composition	> 97 w/w-% sodium formate with corrosion inhibitors
Corrosion Inhibitors	< 3 w/w-% of total
Appearance	White, odorless granular
Particle Size	typical 2-4 mm in diameter
Bulk Density	900 - 950 kg/m ³
Flash Point	Not combustible
Water Content	< 1 w/w-%
Freeze Point (25% solution)	-19 °C
Miscibility with water	81 g per 100 mL at 20 °C
pH (15% solution)	typical 12.0 - 12.5

For more information on our Aviform[®] products and specifications please see www.aviform.com.

General application recommendations

Application rate for	Frost or ice layer < 1mm		Frost or ice layer 1 to 3 mm	
	Temperature	Dosage	Temperature	Dosage
AVIFORM L50	0 °C to -5 °C	15 - 25 g/m ²	0 °C to -5 °C	30 - 40 g/m ²
	-5 °C to -10 °C	25 - 35 g/m ²	-5 °C to -10 °C	40 - 60 g/m ²
AVIFORM S-Solid	0 °C to -5 °C	10 - 20 g/m ²	0 °C to -5 °C	25 - 40 g/m ²
	-5 °C to -10 °C	20 - 30 g/m ²	-5 °C to -10 °C	40 - 50 g/m ²

Attention! The effect of the deicers depends on a variety of elements like weather conditions, surface material and spraying equipment.



ADDCON GmbH

The ADDCON GmbH production sites are located in Bitterfeld / Germany and in Porsgrunn / Norway. The Group is the largest producer of formates worldwide.



To ensure that the products comply with our customer demands for highest quality a strict and comprehensive quality assurance policy has been implemented. The teams in Germany and Norway strive to achieve these high standards.

For more information please contact:

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