

De-Icing Aircraft

OCTAFLO® EF CONCENTRATE



Clariant is the global leader in aircraft and runway de-icing products with over 40 years of experience. Our outstanding expertise in business relationships, product service, logistics and our world class research team make Clariant's Safewing® and Safeway® products your preferred choice in the aviation business.

OCTAFLO® EF CONCENTRATE

PRODUCT DESCRIPTION

- Octaflo® EF is an AMS 1424, propylene glycol based Type I de-icing fluid.
- Octaflo® EF was developed to be low aquatic toxicity fluid.
- Octaflo® EF is a low foaming fluid which evenly covers the aircraft surfaces.

BENEFITS AT A GLANCE

- Low foaming application ensures easy identification of any remaining frozen deposits on the wing.
- Superior wetting properties prevents premature re-icing of already treated surfaces.
- Improved inhibitor package allows the preparation of fluid dilutions with water of different quality and hardness.
- Fully biodegradable, triazole free additive package, gives superior environmental profile.
- Low freezing point (below -65°F) provides operational flexibility.

PERFORMANCE

- Octaflo® EF has outstanding spraying behavior with almost no foaming and excellent wetting ability.
- Therefore, the minimum requirement of the water spray endurance time test (3 minutes) is exceeded.

ENVIRONMENT

Octaflo® EF contains a minimum amount of surfactant and a fully biodegradable, triazole-free corrosion inhibitor package. This gives Octaflo® EF a leading environmental profile.

Aquatic toxicity	Concentrate	50:50 Dilution
LC50 [96h] (fathead minnow)	10.8 g/l	21.6 g/l
LC50 [48h] (daphnia magna)	17.9 g/l	35.8 g/l
LC50 [96h] (rainbow trout)	11.5 g/l	23.0 g/l
LC50 [48h] (ceriodaphnia dubia)	13.8 g/l	27.6 g/l

Biodegradability	Concentrate
in 5 days at 20 °C	>35%

HANDLING

Octaflo® EF is not sensitive to heating and can be stored in a variety of containers during the winter season at high temperatures. Nevertheless, evaporation of water should be avoided.

Octaflo® EF contains an especially developed inhibitor package which allows for the use of almost any tap water, even with high hardness while minimizing the formation of precipitates in the fluid.

The dye package of Octaflo® EF is dark enough to be seen during application. The orange color is designed to fade after exposure to UV light.

CERTIFICATION AND APPROVALS

Octaflo® EF is certified according to the latest revision of AMS 1424. Among this international standard, Octaflo® EF is certified and approved by many airlines around the world.

PRODUCT PROPERTIES

Octaflo® EF Concentrate	Values
Chemical composition	88% propylene glycol
Appearance	orange liquid
Refractive index at 20 °C	1.4240 - 1.4260
pH (neat) at 20 °C	7.8 - 8.7
Density at 20 °C	1.044
Freezing point (diluted 1:1 with water)	< -54 °C
COD	1.65 kg O ₂ /kg
BOD5	0.60 kg O ₂ /kg

IN SERVICE LIMITS

Dilution Octaflo® EF Concentrate : Water	Refractive Index +/- 0.0015	BRIX +/- 0.50	Freezing point	LOUT
100:00	1.4250	52.25	-	do not use
65:35	1.3980	39.00	-54 °C -65 °F	-33 °C -27 °F
60:40	1.3940	37.00	-40 °C -40 °F	-30 °C -22 °F
55:45	1.3890	34.25	-34 °C -30 °F	-24 °C -12 °F
50:50	1.3840	31.50	-28 °C -19 °F	-18 °C -1 °F
45:55	1.3780	28.50	-22 °C -8 °F	-12 °C +10 °F
40:60	1.3740	26.00	-19 °C -2 °F	-9 °C +16 °F
35:65	1.3690	23.00	-15 °C +5 °F	-5 °C +23 °F
30:70	1.3640	20.00	-11 °C +12 °F	-1 °C +29 °F
25:75	1.3580	16.50	-8 °C +17 °F	+0 °C +32 °F
20:80	1.3520	12.75	-6 °C +21 °F	+0 °C +32 °F
10:90	1.3430	6.75	-4 °C +25 °F	+0 °C +32 °F

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