# EASTMAN

# Technical Data Sheet MELTIUM®



Meltium® is a novel formate-based de-icing solution developed expecially for non-airport applications. The product melts snow and ice in a fast, effective and environmentally friendly way. It is free of chlorides and regarded as not harmful to the environment.

Freezing point of Meltium is less than -50 °C and can for this reason be used even at very low temperatures.

# **Typical Properties**

Property	Typical Value, Units				
General					
Appearance	Clear liquid				
Color	Colorless / light yellow				
Assay	50% min. active material				
Density					
@ 20°C	1.33-1.35 g/cm <sup>3</sup>				
Viscosity					
@ 20°C	Max. 3 mPa·s				
Flash Point					
Abel closed cup	Non-flammable				
Freezing Point	<-58 °C				
Solubility in Water	Complete				
pH	<11.5				

### Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

# Applications

Meltium is used as both anti-icing and de-icing chemical. Suggested application rates can be found in the table below. It is however important to take into consideration factors like surface material, surface structure, application-method and current weather situation when using the product. The below figures is therefore only a guide for application and must not be regarded as recommended dosage. We will upon request give advice on application for the respective operator.

In the case of de-icing, the surface should be treated mechanically before applying Meltium. This will reduce the amount of liquid used, resulting in minimal environmental impact and lower cost of the de-icing operation.

In the event of freezing rain, a preventive treatment is highly recommended. Applying Meltium before the start of a light snow or ice event prevents frozen precipitation from accumulating. Since Meltium is both an anti-icing agent as well as a deicer, timely application of Meltium is essential to the continued use of operative surfaces.

Careful monitoring of meteorological conditions will keep you ahead of storm events, and guide you in preventive application of the product.

Meltium can be used with all known existing spraying equipment with compatible materials.

SUGGESTED APPLICATION RATES

	Dry Conditions Ice thickness <1mm Light frost		Wet condin Ice thicknes Heavy frost	ss >1mm	Wet conditions - Snow - Packed snow		Wet conditions - Freezing rain - Ice Thickness 1-3 mm		

Temperature (°C)	Anti-Icing	De-Icing	Anti-Icing	De-Icing	Anti-Icing	De-Icing	Anti-Icing	De-Icing
0 to - 5	20 g/m <sup>2</sup>	20 g/m <sup>2</sup>	20 g/m <sup>2</sup>	30 g/m <sup>2</sup>	30 g/m <sup>2</sup>	40 g/m <sup>2</sup>	40 g/m <sup>2</sup>	50 g/m <sup>2</sup>
-5 to - 10	25 g/m <sup>2</sup>	30 g/m <sup>2</sup>	30 g/m <sup>2</sup>	40 g/m <sup>2</sup>	40 g/m <sup>2</sup>	50 g/m <sup>2</sup>	50 g/m <sup>2</sup>	60 g/m <sup>2</sup>
-10 to - 15	30 g/m <sup>2</sup>	40 g/m <sup>2</sup>	40 g/m <sup>2</sup>	50 g/m <sup>2</sup>	50 g/m <sup>2</sup>	60 g/m <sup>2</sup>	60 g/m <sup>2</sup>	60 g/m <sup>2</sup>

Please see the Material Safety Data Sheet before handling the material.

# **Handling Precautions**

Meltium is delivered ready to use. It should not be diluted nor should it be concentrated further.

Meltium is compatible with most known materials used in ice melting facilities, both related to equipment for storage and equipment for applying the product.

Meltium shows moderate corrosive and staining effect on zinc, galvanized material, soft solders and silver. We recommend painting or protecting these items or replace them with items of compatible materials.

The table below list materials that have been shown to be compatible with Meltium.

### **METALS:**

Stainless Steel Carbon Steel (note! impact like with water) Aluminium alloys (bare & anodized) Magnesium alloys (wrought, dichromate treated and epoxy coated) Titanium Cadmium plated steel Copper (acid pickled) Bronze (copper/tin)

### **POLYMERS:**

Polyethylene Plastics Glass fiber reinforced polyester (high pH resistant resin) Polymethacrylate Acrylic plastic Polychloroprene Silicone Vulcanized butadiene-acrylonitrite Vulcanized butadiene-propylene Painted surfaces Bitumen

# Packaging

Meltium is available in bulk and IBC (1000L). Meltium shows no sign of deterioration when stored for a longer period of time.

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