TECHNICAL DATA SHEET (TDS)

PLAS ICE

Snow and Ice Melting Solution

Liquid anti-icing and de-icing agent

Product Description

PLAS ICE is a ready-to-use liquid de-icing and anti-icing solution based on magnesium chloride or calcium chloride, developed to fight snow and ice forming on roads, pavements, ramps, car parks, bridges and open areas in winter.

Applied before snowfall, it forms a thin film that stops snow and ice from bonding to the ground; applied after snowfall, it quickly melts the existing ice layer.

Features and Benefits

- **Effective down to −40 °C:** Melts ice even at very low temperatures and delays re-freezing.
- **Fast action:** Releases heat as it dissolves and starts working on contact.
- **Protective film:** The thin film left on the surface prevents snow and ice from bonding to the ground.
- **Ready to use:** Applied undiluted by spraying; spreads evenly over the surface.
- **Leaves no marks:** Clear liquid; leaves no marks or stains on asphalt, concrete, marble or paving at recommended rates.
- **Non-flammable:** Has no flash point and is stored safely.



1,250 kg IBC tank

Packaging

PLAS ICE is supplied in 35 kg drums, 1,250 kg IBC tanks and by bulk tanker.



35 kg drum

Storage

- Store in the original, tightly closed container in a cool, dry place away from direct sunlight.
- Shelf life is 2 years from the date of manufacture; product left at the end of the season can be used the following season.

Equipment

PLAS ICE is applied with backpack or hand sprayers, vehicle-mounted spray tanks or IBC spray bars, and fixed nozzle lines. Parts in contact with the product must be resistant to chloride solutions (stainless steel, polyethylene, polypropylene); rinse the equipment with clean water after each use.

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Technical Properties

Property	Value	Method
Product type	De-icing and anti-icing solution	—
Active substance	Based on magnesium chloride or calcium chloride	—
Appearance	Clear liquid	—
Density (20 °C)	≈ 1.25 g/cm³	—
pH (20 °C)	7.0 – 9.0	—
Effective temperature	Down to −40 °C	—
Flash point	None (non-flammable)	—
Solubility in water	Fully soluble	—
Corrosion (carbon steel)	< 0.05 mg/cm²/day	ASTM F 483
Corrosion (aluminium)	< 0.02 mg/cm²/day	ASTM F 483
Marshall stability loss	< 5 %	—
Ice melting (−15 °C)	1 cm of ice melts in ≈ 30 minutes	—
Effect time on the ground	At least 48 hours	—
Shelf life	2 years from date of manufacture	—

Application

PLAS ICE is applied undiluted, as supplied, by spraying a fine mist that covers the surface evenly. Anti-icing is applied before precipitation starts; de-icing is applied after snow or ice has formed on the surface. Where snow has accumulated heavily, plough mechanically first.

Recommended application rates

Application	When?	Rate
Anti-icing	2–6 hours before precipitation starts	100 – 150 g/m²
De-icing	After snow or ice has formed on the surface	150 – 350 g/m²

Areas of use

- Municipal roads, pavements, squares, highways, bridges, viaducts and tunnel entrances
- Factory, logistics centre and warehouse yards, car parks, ramps and site roads
- Entrances of hospitals, malls and public buildings, stairs, walkways and platforms

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