



PRODUCT PROFILE

deicing / dust control



GENERAL DESCRIPTION

CALSO is a unique product that compares favorably to alternatives such as calcium chloride and magnesium chloride. Produced in flake form, CALSO is a safe and versatile product whose special properties make it useful in a variety of applications.

PRODUCT FEATURES

1. It is deliquescent and hygroscopic which means it dissolves from a solid to a liquid as it attracts and absorbs moisture from the air and surroundings.
2. It is exothermic. This means it releases heat as it dissolves. It will resist freezing down to -30 C.
3. CALSO is a specially engineered amalgamate or fusion of calcium, sodium, magnesium and potassium chlorides. Each individual flake consists of a set concentration of the four key elements: Calcium Chloride (CaCl₂)
Magnesium Chloride (MgCl₂)
Potassium Chloride (KCl)
Sodium Chloride (NaCl)
4. The free flowing anhydrous flake is environmentally safe.
BNQ Certification # 2410-300.



MOST REQUESTED PRODUCTS 2000

CHEMICAL & PHYSICAL PROPERTIES

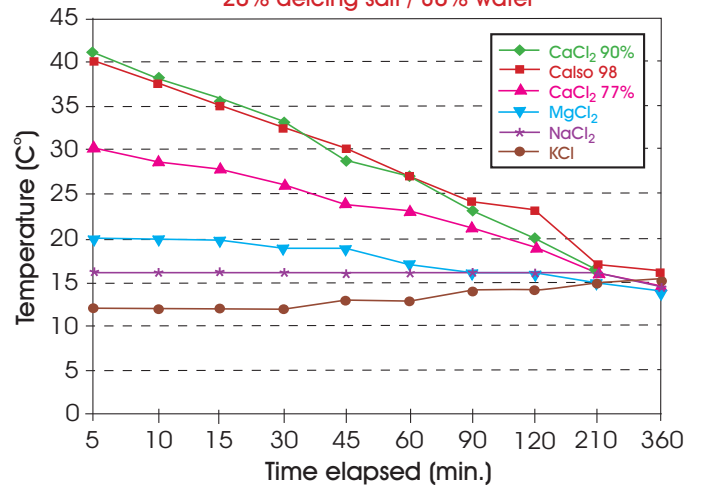
Melting Capacity:

Temperature (°C) Melting Capacity (ml/60 min)

Temperature (°C)	Calso 98	Calcium Chloride (CaCl ₂ 77%)	Road Salt (NaCl)
-4.5 (24°F)	30.5	25.6	28.7
-9.3 (15°F)	20.4	18.6	17.6
-14.4 (6°F)	15.0	13.3	6.2
-19.7 (3°F)	9.5	11.2	0.7

Exothermic Energy:

HEAT PRODUCTION TESTS
20% deicing salt / 80% water



Typical Sieve Analysis:

Sieve Size	Weight % Passing
3/8 - in.	100
No. 4	92
No. 8	53
No. 10	38
No. 20	6
No. 30	1

Appearance: Grayish-white flake

Assay: 98% active by weight

pH: 8.6 in 1% solution

Bulk Density: 1060-1090 kg. / m³ (67 lb. / Ft³)

Solubility: 21 g / ml

Storage: Dry and ventilated area

ROAD MAINTENANCE

Winter

Snow and Ice melter.

Application: for walking surfaces apply 60 grams per m². Provides fast melting action...down to -30°C.

Mixed with rock salt

Application: mix with salt at 20-25% by weight. CALSO allows salt to work faster at lower temperatures while reducing spread rates by up to 50%.

Freezeproofing winter sand/abrasives

Application: mix with sand at a rate of 3-5% by weight during stockpile operation. Keeps winter sand from freezing while improving its adherence to road surfaces.

Thawing of sewers and culverts

Application: apply CALSO to ice as required to initiate waterflow.

Summer

Dust control for gravel roads and other unpaved surfaces

Application: grade and crown surface as appropriate. Water thoroughly then apply 0.75 kg./m².

Road surface application of CALSO

Road type	Rate of Application	Quantity of CALSO metric ton / km				
		Treated width (m)				
Municipal road	0.75 kg/m ²	2.5	3.5	5.0	6.0	7.0
Municipal road	0.75 kg/m ²	2.0	2.5	3.5	4.5	5.0
Resource road	1.00 kg/m ²	2.5	3.5	5.0	6.0	7.0
Stabilization	1.75 kg/m ²	4.0	6.0	9.0	10.0	12.0

MINING

Freezeproofing and thawing of coal and various ores.

Application: uniformly apply 0.5% to 3.5% by weight of raw material. Recommended quantities will vary based on temperatures and surface moisture levels.

Preparation of high density drilling and anti-freeze brines.

A 30% brine of CALSO has a density of 1.206 and will resist freezing down to -30°C.

SAFETY & HANDLING

For brief contact with CALSO, no precautions other than protective clothing such as rubber gloves, safety goggles, rubber safety boots, pants and long sleeved shirt is required. Work in ventilated areas. For dusty conditions an approved respiratory mask should be worn when handling.

AVAILABILITY

CALSO is available in 25 kg. (55 lb.) plastic bags, 1000 kg. (2200 lb.) super sacs and in bulk form. Custom blending and packaging is also available.

FOR MORE INFORMATION

CALSO is manufactured in Canada and is marketed exclusively by:

Matrex Company

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Port Perry, Ontario
L9L 1B2 CANADA

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