

Description

DOWFLAKE Xtra 83-87% Calcium Chloride Flakes are white, free-flowing flakes that meet or exceed ASTM D98 and AASHTO M144 purity requirements for Type S, Grade 3, Class B calcium chloride. With a minimum of 83% active ingredient (calcium chloride), it is 10% higher than conventional 77-80% calcium chloride flake.

This purified inorganic salt is produced by removing water from a naturally occurring brine solution. The National Organic Standards Board classified the brine process as “non-synthetic” since it does not involve reactions with chemicals such as hydrochloric acid or ammonia.

Application

DOWFLAKE Xtra has distinctive properties that make it the ideal choice for ice melting, dust control, concrete acceleration, and many other applications. Its higher concentration provides a lower application rate than conventional 77-80% calcium chloride flake.

DOWFLAKE Xtra releases heat to melt snow and ice faster and across a wider range of temperatures than other materials. Mix it with rock salt, sand, and gravel to improve their performance. It reduces dust on unpaved surfaces by absorbing moisture from its surroundings, keeping the surface damp and binding dust particles to the gravel.

Adding DOWFLAKE Xtra to concrete results in reduced time for initial and final set, increased early strength, and protection in cold weather.

When put into solution, DOWFLAKE Xtra is effective in many other applications, including tire weighting, brine refrigeration, and as an inert ingredient in pesticide formulations.

Storage and Shelf Life

Store in a dry area, and tightly reseal after each use. To maintain product quality while in storage, solid calcium chloride must be protected from moisture. If the product is on a pallet covered by an intact plastic shroud, it can be stored outdoors on a well-drained surface. If the shroud is torn, pierced, or removed, then the palletized product should be stored indoors or under a waterproof covering.

When properly stored to protect from moisture contact, the expected shelf life for solid calcium chloride products is 36 months. Calcium chloride does not degrade or deteriorate. However, the shelf life is limited based on the potential for moisture intrusion into the product, which may cause product clumping. Solid calcium chloride absorbs moisture from the air (i.e., is hygroscopic), even to the point of converting to liquid brine (i.e., is deliquescent).

Typical Properties⁽¹⁾

Characteristic	Value
Calcium chloride assay	>83%
Flake size distribution	
Larger than 4.8 mm	<20%
From 0.6 to 4.8 mm	>75%
Smaller than 0.6 mm	<5%
ASTM D98 purity requirements ⁽²⁾	
Total alkali chlorides (as NaCl)	<6%
Total magnesium (as MgCl ₂)	<0.5%
Calcium hydroxide	<0.2%

(1) These data are laboratory results typical of the product, and should not be confused with or regarded as specifications. All percentages are percent by weight.
 (2) On an active ingredient basis.

For more information like safety data sheets (SDS), package options, calculation tools, etc., or to find an authorized distributor of OxyChem's calcium chloride products, please call or visit our website.

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