

Updated LEED Interpretation for Deicers

-LEED Interpretation 10146, which clarifies the requirements for deicing products that are compliant under Sustainable Sites credit 2: Building Exterior & Hardscape Management Plan, was substantially updated on January 1, 2015 and reads as follows:

Projects may use one of the following compliance paths to achieve the deicer portion of the snow and ice removal requirements for the credit addressing: Building Exterior & Hardscape Management Plans.

Compliance Path 1:

ONLY USE DEICERS THAT CONTAIN 100% CMA (Calcium Magnesium Acetate). - (Equal to Salt Depot's Viper 2.0 - 100% CMA and is LEED Certified. It has a melting temperature of 10F; because it doesn't contain chlorides that would bring the melting temperature down.

Compliance Path 2:

A: Demonstrate that environmentally preferred deicers were used at least 20% of the time during the performance period, measured by weight, volume, or cost.

-Deicers that contain less than 5% sodium chloride, calcium chloride, magnesium chloride, potassium chloride, potassium acetate, ammonia-based products & ferrocyanide products.

B: Implement a deicer quality assurance monitoring plan during the performance period to track ongoing deicer use & record its effects for every snow event:

-Monitoring could include: if deicer was applied prior to snow events, if areas were shoveled prior to deicer application, the amount of snow over the season, the temperature when deicer was applied, the time for snow to melt, etc

-Include a plan to phase out all deicers that are not environmentally preferred within 3 years.

Any deicer that contains more than 5% sodium chloride, calcium chloride, magnesium chloride, potassium chloride, potassium acetate, ammonia-based products & ferrocyanide product is NOT considered environmentally preferred. You will NOT qualify for this credit if it is used more than 80% of the time.

Acetates

Much of the information on the environmental impacts of acetate-based deicers is based on studies regarding calcium-magnesium acetate (CMA) Therefore, much of the information presented in this section is related specifically to CMA. Modeling studies have estimated that the concentrations of CMA in the runoff from highways is between 10 and 100 mg/L, with a maximum concentration of 5,000 ppm. The typical annual mass loading is estimated to be 10 tons/linear-mile (Horner, 1988). Despite high mass loading, runoff and receiving water are predicted to dilute the concentration.

CMA is granulated calcium magnesium acetate which a patented chemical formulation of dolomitic acid and acetic acid. CMA is a tested and commercially developed technology used worldwide to eliminate environmental concerns and solve problems associated with corrosion and concrete spalling. CMA looks similar to other de-icers.