

# RoadSaver®

## Dust Control and Road Stabilization

### PRODUCT DESCRIPTION

RoadSaver is a high purity grade of magnesium chloride ( $MgCl_2$ ) used as a dust control and soil stabilization agent. Magnesium chloride is a hygroscopic compound that attracts moisture from the air and resists evaporation. RoadSaver binds fine dust and aggregate to keep surfaces stable and dust free.

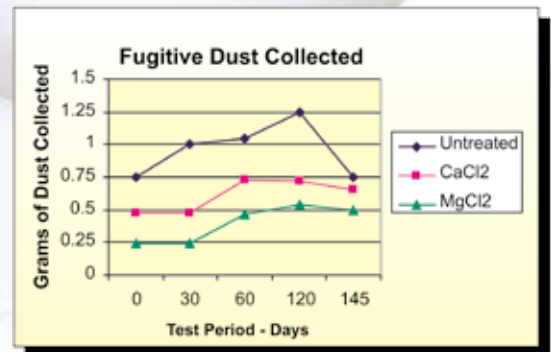
### USES OR APPLICATION

As a dust control agent, the recommended application rate is 0.3 - 0.5 gallons per square yard. When continually using RoadSaver as a dust control product the application rates can tend to decrease from the 0.5 to the 0.3 rate depending on weather and traffic. Continual use will help reduce road base loss. As a soil stabilizer, using a 2-3" blade mix process, it is recommended to apply a total of 0.4 - 0.5 gallons per square yard. According to the Colorado State University Study on the Relative Effectiveness of Road Dust Suppressants, magnesium chloride out performed calcium chloride, in terms of dust control throughout a 145 day test period. (See graph below)

### PERFORMANCE AND DIAGRAMS

Magnesium chloride ( $MgCl_2$ ), calcium chloride ( $CaCl_2$ ), and lignosulfonates are the dominant dust control and road stabilization products in North America. These products provide excellent performance depending on the environmental challenge being faced. Such factors as temperature, humidity level, precipitation, and especially soil/aggregate type/gradation will impact the success or failure of one product verses another.

The Transportation Association of Canada (TAC), in its Guidelines for Cost Effective Use and Application of Dust Palliatives suggests that "calcium chloride loses its hygroscopicity (ability to absorb moisture from the air) as relative humidity decreases. Calcium chloride should be used with caution if long dry spells are anticipated or low humidity exists." They found that "magnesium chloride, while also hygroscopic, remains so at much higher temperatures and lower relative humidity than calcium chloride and therefore may be more suitable to dry climates." They also state that magnesium chloride is "less corrosive than calcium chloride."



### FEATURES

Dust suppression . . . . .

Improved road quality. . . . .

Road stabilization . . . . .

### BENEFITS

- Keeps fines on road
- Better public relations
- Cleaner air
- Reduces dust to PM10 standard

- Fewer pot holes
- Less washboarding
- Ensure public safety

- Less loss of road base
- Reduces road maintenance
- More value for the dollar

# Dust Control

## TYPICAL ANALYSIS

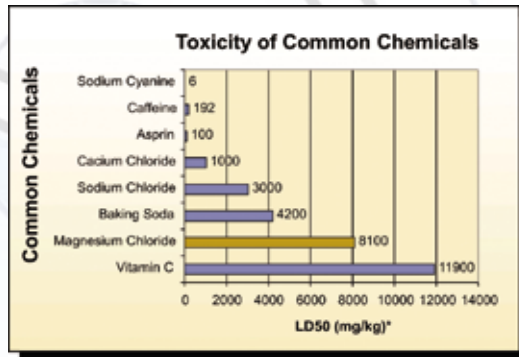
Magnesium Chloride 30%  
10.85 gallons  
pH - 6.0 - 7.5 in a 5% solution

## ROAD PREPARATION

By properly preparing the road for application, dust control or soil stabilization projects could last 2 to 3 times longer. Spending a little additional time and effort on the front end will eliminate unnecessary re-applications that would be required otherwise. Recommended techniques include blading the surface, eliminating potholes and washboarding, placing the right crown in the roadway and pre-wetting the application area.

## HEALTH, TOXICITY & ENVIRONMENTAL

RoadSaver is the least harmful of common dust suppressants to vegetation and groundwater according to independent studies conducted by the US Department of Agriculture. It is non-irritating and safer to handle and won't cause burning or stinging associated with some of the other dust control products. RoadSaver is free of toxic metals and substances, is used as an ice control agent, and also as a fertilizer for crops such as turf and small grains.



LD50 is the amount of substance, in mg per kg of body weight, expected to kill 50% of the test animals in a controlled study. The larger the LD50 number, the lower the toxicity and safer the substance.

## TESTIMONIALS

*"EnviroTech's product is always within the guidelines set in the contract."*

**Jake B. Mall**  
Garfield County Colorado,  
Road and Bridge Department

*"We have used everything from tree sap to calcium chloride to waste oil. To date, magnesium chloride (Roadsaver) is the best thing we've used."*

**William J. Hoffbeck**  
City of Lakeville, MN



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