

DustGard Crystals Application Section



STABLES, RODEOS AND ARENAS



Application:	HorseCo Livestock and Stables Indoor stables Stockyard	
Location:	Holden, Utah	
Reason for Application:	To control dust in the indoor riding arenas and cattle yards.	
Frequency:	Indoor stables:	Once every 2-3 years
	Cattle yards:	Once per year
Results:	Indoor riding arena problem of choking dust has been eliminated. Provides a better environment for both people and animals. Dust within the cattle yard has been eliminated. Owner cites better overall animal health as a result.	



PARKING LOTS AND TRUCK YARDS



Application:	Great Salt Lake Minerals Loadout Yard Parking lot and road leading into truck facility
Location:	Utah
Reason for Application:	Dust control of facilities Aesthetics of truck yard.
Frequency:	Once per year
Results:	One application per year has effectively controlled the dust throughout multiple facilities in the Harris Chemical Group system.



Crystal Application Guide

Square Yards	Minimal Application in Lbs.	Normal Application in Lbs.	Heavy Application in Lbs.
1	1.7	2.5	3.3
10	16.5	25	33
25	42	62	83
100	166	248	331
500	827	1240	1653
1,000	1653	2480	3306

For optimal results, a DustGard[®] solution should be used. This ensures a maximum coverage of the area, which leads to an extended product life. However, if a solution cannot be made, DustGard[®] crystals are also a very effective dust suppressant.

If it is possible to pre-wet the surface or apply following a rain, this will also extend the life of the product. Make sure that the surface is moist, but not soaked or muddy. Do not apply during a rain event as the material will wash away before it has a chance to set.

Simply apply the DustGard[®] crystals evenly to the desired surface. The crystals will pull moisture from the air or ground and begin turning into a solution over the next 4 to 48 hours, depending on the availability of moisture.



Road Preparation

Optimal results for road use requires a minimal amount of preparation.

Road Surface Preparation:

If the surface is permeable, smooth, firm and shaped for drainage, it's ready for application. Before applying DustGard make sure that ruts, washboards, potholes, drainage problems, gravel segregation and hard, impervious areas have been rectified. *Correct surface preparation is very important to the overall success of the DustGard treatment.*

Blading:

Blading will take care of problems like ruts and potholes, and provide a smooth, well-drained surface. Blading is not necessary if the surface is already smooth, shaped and evenly mixed.

Compacting:

If blading loosens the surface, it should be watered and rolled (compacted) to restore a dense, tight surface.

Prewatering:

Before applying DustGard the road should be watered, ideally to a depth of 3 to 4 inches, to break the surface tension and allow maximum DustGard penetration. If the surface does not allow for easy water penetration, it should be bladed and re-compacted, creating a firm but easily penetrated surface.

Turning Crystals into Solution:

Application of a solution will ensure a more even and thorough coverage. This will extend the life of the application.

Converting into....



Making a 30% DustGard® Liquid

To make a 30% DustGard® Liquid from DustGard® Crystals simply follow the chart below to determine the quantity of solution desired. A simple ratio to remember is to take 13.9 pounds of DustGard® Crystals for every gallon of water. This will yield a 30% DustGard® Liquid which will weigh 10.8 pounds per gallon.

Gallons of Solution Needed	MgCl ₂ Crystals (Lbs)	Water (Gallons)
55	371	27
100	675	49
500	3,375	243
1,000	6,750	486
1,500	10,125	728
2,000	13,500	971
2,500	16,875	1,214
3,000	20,250	1,457
3,500	23,625	1,700
4,000	27,000	1,942
4,500	30,375	2,185
5,000	33,750	2,428

DustGard® Crystals contain 48-49% magnesium chloride.

DustGard® Solution contains minimum 30% magnesium chloride in solution.



Liquid Application Guide

Road Width (Feet)	Square Yards per Mile	Gallons per Mile @ .25 gal/sy	Gallons per Mile @ .35 gal/sy	Gallons per Mile @ .45 gal/sy	Gallons per Mile @ .50 gal/sy
4	2,347	587	821	1,056	1,173
8	4,694	1,173	1,643	2,112	2,346
12	7,040	1,760	2,464	3,168	3,520
16	9,386	2,346	3,285	4,224	4,694
20	11,732	2,933	4,106	5,279	5,866
24	14,078	3,520	4,927	6,335	7,039

For optimal results, a DustGard® solution should be used. This ensures a maximum coverage of the area, which leads to an extended product life.

A rule of thumb to determine material requirements is to multiply 300 gallons for each foot wide of road per mile long. This will give you the approximate amount for 0.5 gallons per square yard.

Example: 12 ft. wide road

300 gallons X 12 ft. is 3,600 gallons per mile