



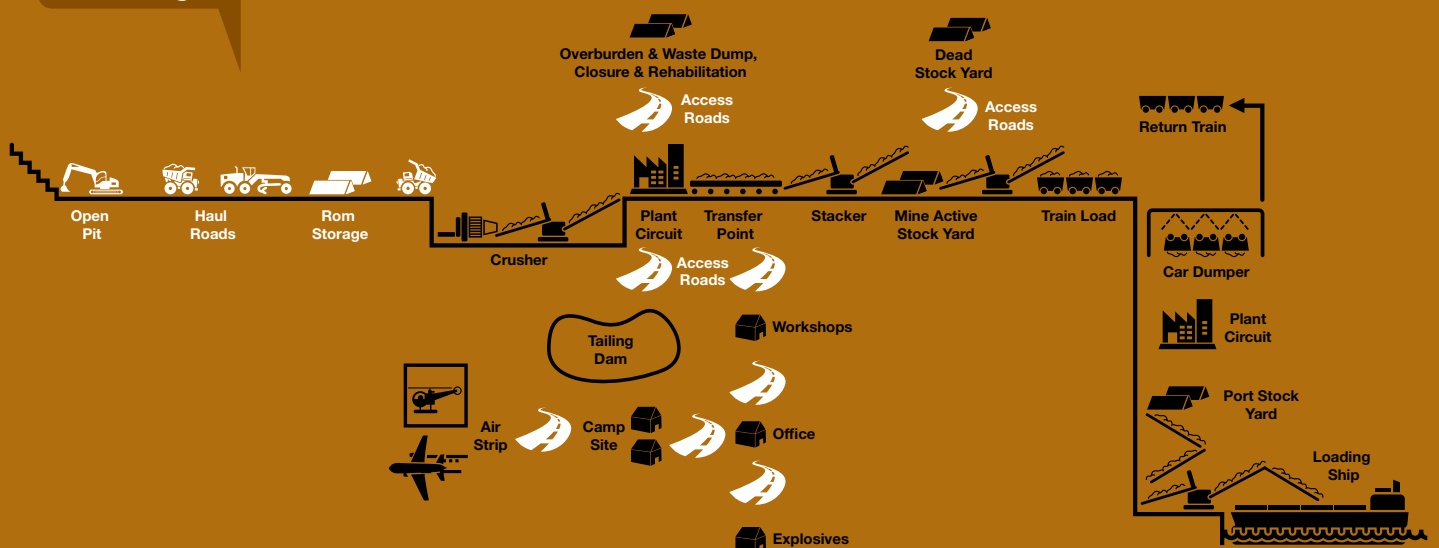
## Mining Industry Solutions



Roads and  
Trafficable Areas  
Road Dust  
Suppression

**DustMag®**

**DustMag®**



# Roads and Trafficable Areas Road Dust Suppressant DustMag®

Stabilization and compaction agent • Top down application like water cart run  
Large reduction in water required for dust suppression on roads • Can be watering supplement - reduces evaporation • Easy to use - comes ready to go - no mixing • Environmentally benign

## History

DustMag® has gained widespread acceptance around Australia and the world as the single best dust suppressant on the market. Since 1983, DustMag® has done the job for Rainstorm's customers from the arid minesites of Western Australia and Nevada to the public roads of Tasmania and British Columbia. Introduced first to Australia in the states of Victoria and New South Wales in 1990 it is now available in all states. DustMag® has proven itself time and again, winning friends with ease of application and dramatic results where it counts - on the ground.

## Description

A hygroscopic solution based on magnesium chloride DustMag® is a bulk liquid delivered to the jobsite "ready to go." It requires no mixing or special preparation and is easily applied by watercart, either the customer's or Rainstorm's. Used usually upon trafficked

areas such as roadways it acts as a compaction agent, stabilizer and dust suppressant.

## Product Life

The longevity of any dust suppressant is dependant upon external factors such as the type of gravel treated, traffic use and climate patterns. DustMag® is unusual in the fact that heavier traffic volumes can actually increase it's lifespan due to the additional compaction benefits realised. It will last longer on roads with medium to heavy traffic than on areas that receive little or no traffic.

Applications will last between 10 and 14 weeks dust free without any watering.

Rainstorm will usually make the initial application then place additional DustMag® into storage tanks upon the customer's premises allowing the customer to add small volumes to their watercarts for top-up purposes.

## Application

Application is made by a (preferably) pressurised, monitor-equipped spray truck.

- The area to be treated should be grader trimmed deep enough to remove potholes, ruts and corrugations and then be graded to a slope conducive to good drainage
- Prior to the application of the DustMag® the area should be pre-watered. The objective is to place enough water in the gravel to break down surface tension to aid the penetration of the DustMag® without bringing the material to the saturation point. This is an important step for the long term performance of the product.
- The DustMag® is then applied top down by watercart at a usual rate of 1.8 litres per square metre.
- Traffic can immediately use the area although it should initially be slowed to reduce splashing and tracking. Care should be taken to eliminate spillage onto seal roads due to possible slipperiness.

Although the above application procedure is customary, DustMag® is suitable to a number of different techniques and methods. It can be applied as a "shandy" mixed with water applied on an ongoing basis.



## How It Works

DustMag® works primarily because it is hygroscopic, meaning it attracts and retains moisture from the air.

It expedites the compaction process by slowing the rate of evaporation of moisture from the mixture during the use of any compaction equipment and as an aid in the overall retention of moisture, thus continuing the compaction process during the service life of the DustMag® treated area.

In most cases DustMag® will result in increased density for any given compaction effort. The ongoing compaction achieved during the use of the roadway means that the area will continue to improve for several weeks after the initial treatment reaching a level that is unobtainable on unsealed roads by any other practical, known method.

The small levels of moisture retained by DustMag® achieve these high levels of compaction and dust suppression three basic ways.

Firstly DustMag® simply binds itself and water molecules to the surface fines making them heavier and less prone to lifting from the road by wind or traffic action. Secondly, as the magnesium

chloride component of DustMag® penetrates the road it reduces any negative charge on the particles. This in turn, reduces the particles tendency to repel each other and reduces the thickness of water coating the particles. This allows the particles to move closer together.

There are more benefits from DustMag retention of surface fines than just the obvious reduction of the dust hazard. A DustMag treatment program will result in smoother, harder road surface that can often allow faster safe driving speeds.

## Pricing

DustMag®, as a bulk product, is priced differently in various parts of Australia to allow for the freight component. It can be charged by litre or by the square metre and either as a delivered product or as a complete service. Contact the nearest Rainstorm office and inform them of your job's location and size and they will quickly be able to give you a price



**Eastern Australia**  
PO Box 334  
LARA Vic 3212

☎ 03 5282 4024  
☎ 03 5282 4029

**Western Australia**  
106 Maddington Road  
Maddington WA 6109

☎ 08 9452 0235  
☎ 08 9452 3975

✉ info@rainstorm.com.au  
🌐 www.rainstorm.com.au