



**DUST STOP MUNICIPAL BLEND (DSMB)
FREQUENTLY ASKED QUESTIONS**

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1) Why use Dust Stop Municipal Blend for dust suppression on your roads?

Dust Stop Municipal Blend should be used on your roads because it is a non-corrosive and environmentally friendly alternative to chlorides. Dust Stop Municipal Blend is not only environmentally friendly and non-corrosive, but also highly effective on a variety of road and material types, applied using standard techniques and equipment, and does not run-off or get sticky in the rain. Products such as various oil based emulsions and chloride based products (magnesium chloride / calcium chloride) have been used in the past for dust suppression at the expense of the environment (Canadian Environmental Protection Act 1999-link below), none of which is a concern for Dust Stop Municipal Blend. The product is based on organic sugar and starch ingredients, as well as a proprietary mineral compound, providing effective dust control with no adverse impact on the environment.
http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl2-lsp2/road_salt_sels_voirie/index-eng.php#a02

2) What is the difference between Dust Stop Municipal Blend and other products on the market?

Dust Stop Municipal Blend is specifically designed as a non-corrosive and environmentally friendly alternative to other dust control products such as magnesium chloride, calcium chloride, offering superior road dust control results. Dust Stop Municipal Blend is very cost-competitive with road salts, while being able to very effectively eliminate unwanted fugitive dust from unpaved roads of any soil type. While road salts are minimally effective, they are hygroscopic by nature, meaning they require moisture, which they attract to the road, to be effective, and are therefore not effective during long periods of dry weather, and can also run-off in the rain. Dust Stop Municipal Blend is not hygroscopic, so it is not burdened with the same issues road salts have during prolonged dry periods, or wet weather. The concentrated liquid formulation is easily mixed with several parts water prior to its application, allowing it to be easily transported and applied with standard water trucks. Once the solution is sprayed on the road and allowed to dry, immediate dust control results will be achieved. In comparison to other dust control products mentioned above, Dust Stop Municipal Blend requires a reduced application frequency further reducing application and maintenance costs.

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3) What is Dust Stop Municipal Blend made of?

Dust Stop Municipal Blend’s proprietary formula is composed of an environmentally friendly blend of sugars, starches and minerals. Dust Stop Municipal Blend utilizes these main inputs in a concentrated liquid form to produce a very effective dust control product that is applicable to almost any material type.

4) How does Dust Stop Municipal Blend work?

The unique blend of materials utilizes the functional properties of sugars and starches allowing DSMB to bind and harden any loose particulate matter, decreasing dust in road surfaces. The product’s unique blend of materials also functions to reduce road surface issues both during and after rain. The incorporated sugars compete for water making it less available to bind with other soil molecules, while providing some minimal structural support and added road stability. The product will re-set once road surfaces dry, re-binding any loose materials. For these reasons, DSMB is not adversely affected by heavy rain, yet very effective and long lasting in dry weather, with no adverse effects on the environment or vehicles using the road due to its non-corrosive properties.

5) What are the benefits of Dust Stop Municipal Blend?

Dust Stop Municipal Blend has numerous benefits associated with its use as a dust control product. Dust Stop Municipal Blend is supplied in concentrated liquid form, allowing for easier transportation as well as application. The ingredients in the product provide stability to the road surface that decrease maintenance requirements and significant dust reduction. The unique blend of materials utilizes the functional properties of sugars and starches allow DSMB to bind and harden any loose particulate matter, decreasing dust on road surfaces. These materials function to reduce road surface issues in both dry and wet conditions. Once wet, the product has the ability to re-set once the road surface becomes dry, re-binding any loose materials. Due to the specific blend of sugars and starches, it will rejuvenate with moisture allowing it last longer than other products on the market, yet not run-off in the rain. For these reasons application and maintenance costs can be reduced. Dust Stop Municipal blend is non corrosive, will not cause corrosion to equipment or vehicles and does not have any harmful effects to roadside vegetation making it safe to use in sensitive environmental areas.

6) What kinds of roads is Dust Stop Municipal Blend applicable for?

Dust Stop Municipal Blend is an effective dust control product on any unpaved roads or surfaces requiring dust suppression and temporary soil stabilization. Dust Stop Municipal Blend is effective on municipal roads, secondary roads, county roads, mine haul roads, access roads, runways, helipads, parking lots, driveways and a wide range of other applications that require dust suppression or temporary stabilization such as tailings piles, stockpiles, erosion control and open haulage situations.



7) How do you apply Dust Stop Municipal Blend?

Dust Stop Municipal Blend is applied with standard road construction equipment and can be applied topically or mixed into the top layer of the road material. The first step involved in the application of Dust Stop Municipal Blend is to determine the area of the road / surface that you will be treating. Once you determine this you can calculate the amount of water and Dust Stop Municipal Blend that is required (please communicate with your local representative who will help you figure out the best application rate for your requirements). The next step in the application of the product is to add the Dust Stop Municipal Blend with water prior to the application of the product. Always add the water to the water truck prior to the Dust Stop Municipal Blend. Once the pre-determined amount of water is added to the truck, add the pre-determined amount of Dust Stop Municipal Blend. Once the product is added to the water truck it can immediately be sprayed on the road surface. Once the product is applied you will notice dust control results immediately, however traffic should stay off of the road until the product has time to dry (drying time can vary depending on the climatic conditions on the day of application, in many cases is around 1 hour on a warm day).

If mixing the product into the road surface, the addition of a road grader and rubber wheeled compactor needs to be added to the project. Generally performed during routine maintenance, the DSMB can be mixed into the soil once the top layer has been loosened to repair potholes and wash boarding. The prescribed mixture of water and DSMB should be applied evenly and lightly mixed into the soil prior to shaping and compacting. Shaping of the road surface is still important to ensure that water is quickly evacuated away from the road surface. Additional details and specifics can be discussed with your Cypher representative.

8) What happens to Dust Stop Municipal Blend when it rains?

There are no long term effects on Dust Stop Municipal Blend if it is subjected to rain. Dust Stop Municipal Blend contains a blend of soluble sugars, starches, and an insoluble mineral component that once cured are able to hold their strength in the presence of water. For these reasons, DSMB is not adversely affected by heavy rain, yet very effective and long lasting in dry weather, with no adverse effects on the environment or vehicles using the road due to its non-corrosive properties.

9) Is Dust Stop Municipal Blend effective during long periods of dry weather?

Yes, Dust Stop Municipal Blend is an effective dust control product during long periods of dry weather. One reason Dust Stop Municipal Blend is so effective in dry weather is that, unlike chloride-based products, it is not hygroscopic so it does not rely 100% on the ambient moisture in the atmosphere to work. The product derives its main efficacy through the hardening and binding power of its ingredients, which forms a physical barrier over the surface of the road, binding the dust particles down and providing long term dust control results.

10) Is Dust Stop Municipal Blend effective on all material types?

Yes, Dust Stop Municipal Blend is an effective dust control product on almost any material type. Dust Stop Municipal Blend will bond to any solid material it is exposed to, it will incorporate any particles it touches into the film once it cures. Therefore, almost any soil type can be treated with Dust Stop Municipal Blend. However, the application rate of Dust Stop Municipal Blend that is recommended may vary slightly depending on the material being treated.

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11) How long will Dust Stop Municipal Blend last?

Dust Stop Municipal Blend is a seasonal dust control solution, designed to reduce the frequency of treatments compared to other dust control methods, such as chlorides. Some variables that will affect the longevity of an application would be the application rate used, type of material, wet/rainy conditions, type and amount of traffic and climatic conditions. The application rate will have an effect on the longevity of dust control results you see; the stronger you apply Dust Stop Municipal Blend the longer it will last. Some Dust Stop Municipal Blend users apply it at rates that are much less concentrated and on a more frequent basis, therefore in essence making these applications maintenance doses and allowing for a more cost-effective long-term use of the product.

12) Will Dust Stop Municipal Blend have any adverse effects on the vehicles used to apply it?

No, Dust Stop Municipal Blend will not have any adverse effects on either the vehicles used to apply the product or the vehicles using the road. Dust Stop Municipal Blend has a pH that is almost neutral which is why it will have no corrosive effect on any vehicles it comes into contact with, or any damaging effect to road side vegetation. In fact, Dust Stop Municipal Blend 's use as a dust control product will eliminate harmful dust from having an abrasive effect on the moving parts of the vehicles traveling on the Dust Stop Municipal Blend treated roads therefore reducing their associated maintenance requirements. It is unlike corrosive and toxic products such as chlorides, it will not cause irreversible long term damage to equipment and vehicles.

13) Why use a dust control product?

Dust control should be used to minimize the risks involved with the generation and movement of dust particles emanating from any trafficked unpaved surfaces. Dust also represents the fines that are the essential binders that maintain the strength and stability of an unpaved surface, and help to lock down the aggregate road. It is estimated that for every vehicle traveling one mile of unpaved roadway once a day, every day for a year, one ton of dust is deposited along a corridor extending 500 feet out on either side of the road. This dust poses a threat to human health through inhalation into the lungs, as well as a threat to the safety of the people using the road due to the reduced visibility caused by the thick clouds of dust. The creation of dust is also quite costly because it represents significant annual losses in fine soil material and can cause damage via abrasion to moving parts of the vehicles traveling on the road. Applying a dust suppressant / dust control product, such as Dust Stop Municipal Blend, will help to minimize these threats and provide a much safer, healthier road environment.

Additional information can be found at www.cypherenvironmental.com. For questions, contact your regional distributor or Cypher Environmental Ltd.'s head office at info@CypherEnvironmental.com.

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