



## **DUST STOP LIQUID CONCENTRATE**

### **FREQUENTLY ASKED QUESTIONS**

- 1) **What is dust?**
- 2) **Why use a dust suppressant / dust control product?**
- 3) **What is Dust Stop Liquid Concentrate?**
- 4) **What is Dust Stop Liquid Concentrate made of?**
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- 10) **Is Dust Stop Liquid Concentrate an effective dust suppressant / dust control product during long periods of dry weather?**
- 11) **Is Dust Stop Liquid Concentrate effective for dust control / dust suppression on all soil types?**
- 12) **How long will Dust Stop Liquid Concentrate last?**
- 13) **Will Dust Stop Liquid Concentrate have any adverse effects on the vehicles used to apply it?**

#### 1) **What is dust?**

Dust is an aerosol of particles of any solid material, usually with particulate size less than 100 microns. On Earth, dust occurs in the atmosphere from various sources; soil dust lifted up by wind and traffic, volcanic eruptions, and pollution are some examples.

Airborne dust is considered an aerosol and can have a strong local effect on climate and the environment.

#### 2) **Why use a dust suppressant / dust control product?**

Dust control / dust suppression should be used to minimize the risks involved with the generation and movement of dust particles emanating from any trafficked unpaved surfaces. 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.

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Applying a dust suppressant / dust control product will help to minimize these threats and provide a much safer, healthier road environment.

### **3) What is Dust Stop Liquid Concentrate?**

Dust Stop Liquid Concentrate is a 100% environmentally friendly dust suppressant / dust control product. Dust Stop Liquid Concentrate is applicable to any soil type, is available in a concentrated liquid form and will cost effectively provide superior dust suppression and soil stabilization results.

### **4) What is Dust Stop Liquid Concentrate made of?**

Dust Stop Liquid Concentrate's proprietary formula is composed of environmental friendly polymers. Dust Stop Liquid Concentrate utilizes these polymers in a concentrated liquid form to produce a very effective dust suppressant / dust control product that is applicable to any soil type.

### **5) What are the benefits of Dust Stop Liquid Concentrate?**

Dust Stop Liquid Concentrate has numerous benefits associated with its use as a dust suppressant / dust control product. Dust Stop Liquid Concentrate will not run-off in the rain and it will last during long periods of wet and dry weather. Dust Stop Liquid Concentrate is effective in cold weather, freeze thaw cycles or other fluctuations in temperature. Dust Stop Liquid Concentrate is supplied in concentrated liquid form, allowing for easier application. And as far as dust suppressant / dust control products are concerned, Dust Stop Liquid Concentrate is the easiest to apply and most effective dust suppression product on the market today that is also environmentally friendly.

### **6) Why use Dust Stop Liquid Concentrate for dust suppression on your roads?**

Dust Stop Liquid Concentrate should be used on your roads because it is an environmentally friendly product that can produce all the benefits listed above. For years different toxic products have been used to suppress dust (with varying results). However the use of these toxic dust suppressants / dust control products in the past has led to worse environmental footprints than the use of the road would have yielded had there been no dust suppression used at all.

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

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Act 1999 [http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl2-lsp2/road\\_salt\\_sels\\_voirie/index-eng.php#a02](http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl2-lsp2/road_salt_sels_voirie/index-eng.php#a02) ). Dust Stop Liquid Concentrate is an effective solution for dust suppression on any unpaved road / surface and its use poses no threat to the environment.

**7) What kinds of roads is Dust Stop Liquid Concentrate applicable for?**

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

**8) How do you apply Dust Stop Liquid Concentrate?**

To apply Dust Stop Liquid Concentrate, all that is needed is a water truck with an agitator or re-circulating pump. Unlike traditional dust suppressant / dust control products, Dust Stop Liquid Concentrate does not need to be mixed into the soil or compacted; therefore it does not require either a motor grader or steel drum compactor for its application.

The first step involved in the application of Dust Stop Liquid Concentrate is to figure out the area of the road / surface that you will be treating. Once you figure this out you can calculate the amount of water and Dust Stop Liquid Concentrate 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 mix the Dust Stop Liquid Concentrate with water prior to the topical application of the product. Always add the water to the water truck prior to the Dust Stop Liquid Concentrate. Once the pre-determined amount of water is added to the truck, turn on the re-circulating pump and add the pre-determined amount of Dust Stop Liquid Concentrate and allow for sufficient mixing. Dust Stop Liquid Concentrate Liquid Concentrate is a readily mixable concentration and requires less mixing than most dust suppression products.

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Once the Dust Stop Liquid Concentrate is evenly mixed inside the water truck it can immediately be sprayed on the road surface / soil. Once the Dust Stop Liquid Concentrate 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). For a more detailed look into the application of Dust Stop Liquid Concentrate please see <http://www.cypherenvironmental.com/duststop/application.html>.

**9) What happens to Dust Stop Liquid Concentrate when it rains?**

There is no significant effect on Dust Stop Liquid Concentrate if it is subjected to rain. Dust Stop Liquid Concentrate contains a blend of polymers that once cured are hold their strength in the presence of water. Soils treated with Dust Stop Liquid Concentrate Liquid Concentrate also exhibit negligible sediment, protecting local waterways from sediment loading during high rain events.

**10) Is Dust Stop Liquid Concentrate an effective dust suppressant / dust control product during long periods of dry weather?**

Yes, Dust Stop Liquid Concentrate is an effective dust suppressant / dust control product during long periods of dry weather. One reason Dust Stop Liquid Concentrate is so effective in dry weather is that, unlike chloride-based products, Dust Stop Liquid Concentrate is not hygroscopic so it does not rely 100% on the ambient moisture in the atmosphere to work. Dust Stop Liquid Concentrate will produce a high tensile strength film that is able to penetrate the soil / road and eliminate the potential dispersion of PM 10 dust particles (and smaller) that pose the biggest threat to human health and the environment. Dust Stop Liquid Concentrate is highly effective as a dust suppressant / dust control product in dry weather because the film lasts; it is very resistant to breakdown by both UV rays (from the sun) and enzymes (soil microbes).

**11) Is Dust Stop Liquid Concentrate effective for dust control / dust suppression on all soil types?**

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

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**12) How long will Dust Stop Liquid Concentrate last?**

Dust Stop Liquid Concentrate is a long lasting dust control solution, designed to reduce the frequency of treatments compared to other dust control methods. Some variables that will affect the longevity of an application would be the application rate used, type of soil, type and amount of traffic and climatic conditions. The application rate will have the greatest effect on the longevity of dust control results you see; the stronger you apply Dust Stop Liquid Concentrate, the longer it will last. Some Dust Stop Liquid Concentrate users apply Dust Stop Liquid Concentrate 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.

**13) Will Dust Stop Liquid Concentrate have any adverse effects on the vehicles used to apply it?**

No, Dust Stop Liquid Concentrate will not have any adverse effects on either the vehicles used to apply the product or the vehicles using the Dust Stop Liquid Concentrate treated road. Dust Stop Liquid Concentrate has a pH that is almost neutral and will therefore have no corrosive effect on any vehicles it comes into contact with. In fact, Dust Stop Liquid Concentrate's use as a dust suppressant / dust control product will eliminate harmful dust from having an abrasive effect on the moving parts of the vehicles traveling on the Dust Stop Liquid Concentrate treated roads therefore reducing their associated maintenance requirements.

Additional information can be found at [www.cypherenvironmental.com](http://www.cypherenvironmental.com). For questions, contact your regional distributor or Cypher Environmental Ltd.'s head office at [info@CypherEnvironmental.com](mailto:info@CypherEnvironmental.com).

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