



# EnviroClear

*Dust Suppressant*

## The water conserving solution.

### BENEFITS

- *Easy to Apply*
- *Low Application Rates*
- *Creates a Wetter Surface*
- *Reduces Surface Tension*
- *Perfect for Haul Roads*

### APPLICATIONS

*Haul Roads*  
*Construction Sites*  
*Mine Sites*  
*Excavation & Grading*

EnviroClear is a highly concentrated biodegradable blend of organic wetting agents which sharply reduce the surface tension of water at very low concentrations, thereby providing excellent dust suppression by allowing deeper penetration of the water into the substrate. Water has a high surface tension which makes it inefficient for wetting surfaces that contain high amounts of clay or fine dust particles. EnviroClear significantly improves the ability of water to overcome the surface tension and penetrate deeper. EnviroClear is formulated with a constituent which provides a residual effect after the point of application, thereby allowing for lower usage rates of water and product with continued use. Water alone is the most commonly-used dust suppression worldwide. While water is becoming even more scarce, simply adding a few gallons of EnviroClear to your water truck will save you and our environment significant amounts of water.



[www.tagchemical.com/dust](http://www.tagchemical.com/dust)

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## Application Rates & Techniques

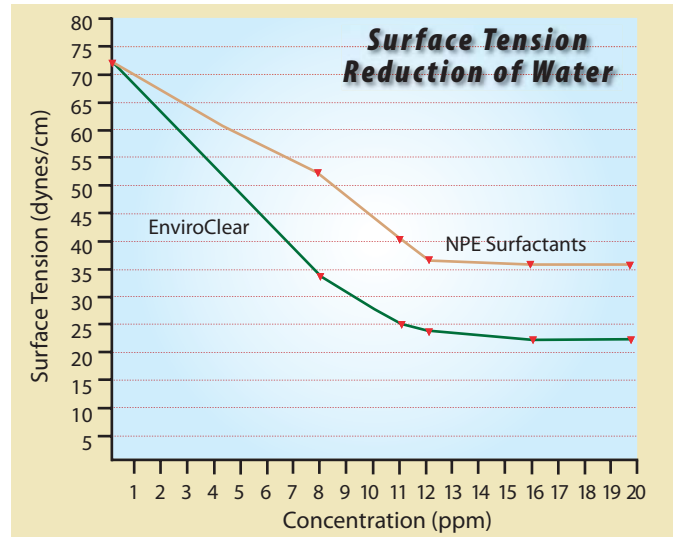
### SURFACE TENSION & WETTING

Fluid surface tension is the tangential force that keeps a fluid together at the air/fluid interface. It is the intermolecular force of attraction between adjacent molecules, expressed in force per unit width, as dynes/centimeter.

As water beads on a leaf, surface tension gives the near spherical shape because a sphere has the smallest possible surface area to volume ratio. Water has a high surface tension in the range of 72 dynes/centimeter.

Wetting is the contact between a liquid and a solid surface, resulting from intermolecular interactions when the two are brought together. The amount of wetting depends on the energies (or surface tensions) of the interfaces involved such that the total energy is minimized.

With EnviroClear, the surface tension can be reduced greatly, to increase penetration depth and create "wetter water."



### APPLICATION

As with all dust suppressants, application rates and methods depend upon the site, environment, soil type, and more. Please contact your TAG representative for site specific recommendations. Each site is unique, and as such, the following application rates are based on averages in the field. EnviroClear is readily dispersible in water and should be diluted in water at a rate of 1,500:1. It is also recommended to add the product when the water truck is almost full.

Surface Type	Particle Grade	Gallons / Acre*	Dilution Rate
Typical loose dirt road	Sand	1-2	1500:1
Compacted dirt road	Silt	2-3	1500:1
Alkaline or clay surfaced road	Clay	3-4	1500:1

### SURFACE PREPARATION

When possible, the surface should be smoothed and leveled out prior to application to allow for better penetration. For silt and clay roads, compaction of the road after application of EnviroClear will ensure a lasting result. After the first application of EnviroClear, you will notice a decline in water consumption over a short period of time.

### SAND SIEVE ANALYSIS

Sand Sieve Analysis is a practice or procedure used to assess the particle size distribution of granular material. The size distribution is critical in determining the type of dust suppressant needed and application rates to be used. The practice of Sieving is quick and accurate, measuring the maximum diameter of a sediment grain. There are four aspects of this proven test, including sizing, sorting, kurtosis, and skewness. After the analysis, we can determine the percent sand, silt and clay in your soil, and textural class, thereby recommended an accurate application rate and method for your needs.

Particle Grade	Size (mm)	Surface Preparation
very coarse sand	1-2	Smooth and level surface prior to application
medium sand	0.25-0.50	
fine sand	0.125-0.25	
silt	0.0039-0.0625	Loosen top inch of soil prior to application for better coverage/penetration, compact soil after application
clay	less than 0.0039	

For a free Sieve Analysis, please send a sample of your soil to:  
The Amber Group, 40 Red Rock, Suite 200, Irvine, California 92604

For more information about EnviroClear and our other products, please contact visit us at [www.tagchemical.com](http://www.tagchemical.com).