

Your Environmental Choice for Dust Control

Dust Fighter Lo-Cal by Den-Mar Brines is 100% naturally occurring products derived from wells located in Lambton County.

Dust Fighter Lo-Cal products from Den-Mar Brines have been evaluated by the Ministry of the Environment (MOE) and are accepted for use in Ontario.

Dust Fighter Lo-Cal supplied by Den-Mar Brine is completely unprocessed and the products impart no energy input footprint at its source.

Dust Fighter Lo-Cal from Den-Mar Brines create no environmental emissions in their production

Dust Fighter Lo-Cal from Den-Mar Brines creates no hazardous waste.

Dust Fighter Lo-Cal from Den-Mar Brines is produced in Lambton County and are **proudly Canadian**.

Dust Fighter Lo-Cal from Den-Mar Brines contains calcium chloride, magnesium chloride, and sodium chloride. The calcium chloride and magnesium chloride are the primary chemicals that provide the properties for the liquid to perform as a dust suppressant. This property is called hygroscopic. The sodium chloride will provide secondary dust suppression as it becomes hygroscopic when relative humidity is above 75% RH. A hygroscopic chemical has the ability to grab hold of water (form hydrates) and produce a solution which is very resistant to evaporation. The average morning relative humidity in Southern Ontario is approximately 81.2% during the dust control months of May, June, July, August, and September.

*A report prepared for The Ontario Ministry of the Environment and Energy, gave oil field brine and calcium chloride the lowest (**most favourable**) toxicity rating among several dust suppressants tested. This report is entitled "A Study of Dust Suppressants in Ontario - Final Report." The table below presents results of aquatic toxicity tests carried out on sample of the traditional dust suppressants.*

Both oil field brine and calcium chloride (35% solution) received the lowest toxicity ratings (Grade 0) in this study indicating the environmental advantages of using these products.

Dust Suppressant	Test Species				
	Rainbow Trout (96 h LC50)		Daphnia Magnia (48 h LC50)		
	Concentration (mg/L)	95% Confidence Interval (mg/L)	Concentration (mg/L)	95% Confidence Interval (mg/L)	Toxicity Rating
Oil Field	52,305	44,099-62,037	24,000	18,000-32,000	Grade 0

Brine	14,857	12,440-17,742	6,387	5,273-7,763	Grade 0
Calcium Chlor	4,337	3,877-4,851	1,342	1,000-1,800	Grade 1
Road Binder	657	589-731	3,536	2,500-5,000	Grade 2
Tembind	535	469-609	625	55-71	Grade 2
Dust Bond	191	166-218	521	415-727	Grade 2
DCS-225 (3:1)					

Note: Based on aquatic toxicity rating system developed by IMCO/FAO/UNESCO/WHO, 1969. Grade ratings vary from 0-4, using the following ranges, and evaluated based on toxicity results for rainbow trout:

- *Grade 0 -- >10,000 ppm* *BEST RATING*
- *Grade 1 -- 1,000 - 10,000 ppm*
- *Grade 2 -- 100 - 1,000 ppm*
- *Grade 3 -- 1 - 100 ppm*
- *Grade 4 -- <1 ppm* *WORST RATING*