EK-35® Environmental Message

February 2001

EK-35® is a specially formulated intense use, continuous life dust control agent. Highly refined synthetic fluids enhanced with natural rosins are used in the formulation of EK-35®. The ingredients used in the manufacture of EK-35® are considered non-hazardous per the regulations of the United States Occupational Safety and Health Administration (OSHA) as well as the Environmental Protection Agency (EPA) and the Department of Transportation (DOT).

EK-35® controls fugitive dust and stabilizes the soil using a patent pending dual mechanism action. First EK-35® weights particles and secondly it unequally agglomerates particles using a re-workable and cohesive action. EK-35® is applied neat. This has the benefit of conserving water; which is a precious natural resource in many areas.

MIDWEST INDUSTRIAL SUPPLY, INC. is in the business of controlling environmental problems, not creating them. This is reflected in the properties of EK-35®. We pride ourselves in developing new products and innovations that enhance the environment by controlling dust and erosion. The following toxicological data demonstrate that EK-35® is such a product.

The impact of a product on water quality can be determined using several methods. Two of the most significant and important are aquatic toxicity and TCLP (Toxicity Characteristic Leaching Procedure). Using "the most sensitive" species for evaluation, aquatic toxicity is a very good indication of the impact that the product will have on aquatic life and ultimately for human water consumption. This theory uses the assumption that if an organism at the bottom of the food chain is unharmed by a chemical then it will have little to no effect on higher species on the food chain. Chronic toxicity tests of EK-35® on Ceriodaphnia dubia and Fathead minnow show that there is "no statistically significant response to application of 100% simulated runoff water".

The EPA under RCRA (Resource Conservation and Recovery Act) developed the TCLP to identify those chemicals or elements that can leach into underground drinking water supplies and expose users to hazardous chemicals. The unique properties of EK-35® make it water resistant, removing the concerns related to its application just prior to a rain event. Rain, should it occur, does not damage the application or result in EK-35® being "washed" from the surface. Chemical dust suppressants should not contain chemicals or elements on that list above regulatory levels. The following will show that EK-35® does not contain any materials on the list above regulatory levels.

A book containing the supporting data is available upon request. Please feel free to contact me via telephone (+330.456.3121), fax (+330.456.3247) or e-mail (cheryl@midwestind.com) should you have any question or require further information.

Sincerely,

MIDWEST INDUSTRIAL SUPPLY, INC.

Cheryl Detloff

Cheryl Detloff
Chief Chemist

MIDWEST INDUSTRIAL SUPPLY, INC.

EK-35® ENVIRONMENTAL DATA

AQUATIC CHRONIC TOXICITY

PERFORMED BY: Enersolv, Inc.

REPORT DATA: September 2000

SUMMARY: EK-35® was applied neat to two test soil samples at a rate of 1 gallon / 120 ft^2 (1 liter per 3 square meters) and 1 gal. / 50 ft^2 (1 liter per 1.25 square meters). A third sample was prepared as a control with the same soil, but no dust suppressant was applied. After 12 hours test water was run over the surface of the samples and collected.

Water baths were prepared using the collected runoff water from the two test samples and the control. Ceriodaphnia dubia and Fathead minnow (Pimephales promelas) were inserted into the appropriate water bath and they were observed for seven days. The water baths were replenished daily with the runoff water collected for that day. Chronic toxicity tests were performed on Ceriodaphnia dubia and Fathead minnow.

RESULTS: At the conclusion of the 7-day test there was no record of mortality for either species at either of the application rates. Tests showed "no statistically significant response to application of 100% simulated runoff water".

EK-35® ENVIRONMENTAL DATA

TCLP TEST

PERFORMED BY: Environmental Control Laboratories, Inc.

REPORT DATA: January 25, 2001

SUMMARY: Toxicity Characteristic Leaching Procedure (TCLP) is a sample preparation and battery of tests that can determine the presence of various elements and chemical compounds. In this test EK-35® is subjected to chemical extractions to "leach" the analytes from the product. This includes metals, volatiles, semivolatiles, and pesticides and herbicides analysis. All testing was performed per standard EPA methods (see below for methods).

RESULTS: Results indicate that EK-35® contains no TCLP elements or compounds above regulatory levels. Most materials were not detected in EK-35®. Please see attached for results and regulatory levels.

EK-35® ENVIRONMENTAL DATA

TCLP TEST

ANALYTE	METHOD	DETECTION LIMIT	RESULTS	REGULATORY LEVELS
METALS				
Arsenic	6010B	0.20	BDL	5.0 mg/L
Barium	6010B	0.020	1.8 mg/L	100.0 mg/L
Cadmium	6010B	0.020	BDL	1.0 mg/L
Chromium	6010B	0.010	0.029 mg/L	5.0 mg/L
Lead	6010B	0.050	BDL	5.0 mg/L
Mercury	7470A	0.0002	BDL	0.2 mg/L
Selenium	6010B	0.20	BDL	1.0 mg/L
Silver	6010B	0.010	BDL	5.0 mg/L
VOLATILES				
Vinyl Chloride	8260	0.01	BDL	0.2 mg/L
1, 1 Dichlorethene	8260	0.005	BDL	0.7 mg/L
2-Butanone (MEK)	8260	0.05	0.224 mg/L	200.0 mg/L
Chloroform	8260	0.02	BDL	6.0 mg/L
Carbon Tetrachloride	8260	0.005	BDL	0.5 mg/L
Benzene	8260	0.005	BDL	0.5 mg/L
1,2 Dichloroethane	8260	0.005	BDL	0.5 mg/L
Trichloroethene	8260	0.005	BDL	0.5 mg/L
Tetrachloroethene	8260	0.005	BDL	0.7 mg/L
Chlorobenzene	8260	0.005	BDL	100.0 mg/L
SEMIVOLATILES				
Cresol	8270	0.2	BDL	200.0 mg/L
1,4 Dichlorobenzene	8270	0.1	BDL	7.5 mg/L
Hexachlorobenzene	8270	0.1	BDL	0.13 mg/L
Hexachlorobutadiene	8270	0.1	BDL	0.5 mg/L
Hexachloroethane	8270	0.1	BDL	3.0 mg/L
2,4 Dinitrotoluene	8270	0.1	BDL	0.13 mg/L
Nitrobenzene	8270	0.1	BDL	2.0 mg/L
Pentachlorophenol	8270	0.5	BDL	100.0 mg/L
Pyridine	8270	0.2	BDL	5.0 mg/L
2,4,5-Trichlorophenol	8270	0.1	BDL	400.0 mg/L
2,4,6-Trichlorophenol	8270	0.1	BDL	2.0 mg/L

EK-35® ENVIRONMENTAL DATA

TCLP TEST

ANALYTE	METHOD	DETECTION LIMIT	RESULTS	REGULATORY LEVELS
PESTICIDES & HERBICIDES				
Chlordane	8081A	0.0002	BDL	0.03 mg/L
Endrin	8081A	0.0005	BDL	0.02 mg/L
Heptachlor, Total	8081A	0.0005	BDL	0.008 mg/L
Lindane	8081A	0.0002	BDL	0.4 mg/L
Methoxychlor	8081A	0.0005	BDL	10.0 mg/L
Toxaphene	8081A	0.0002	BDL	0.5 mg/L
2,4,5-TP (Silvex)	8150	0.01	BDL	1.0 mg/L
2,4-D	8150	0.01	BDL	10.0 mg/L