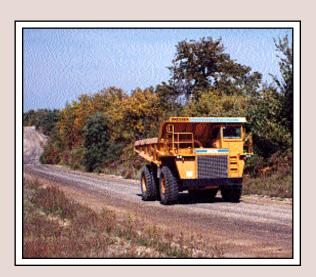
Mine Road STABILIZATION



Engineered for Air Quality, Road Quality

<u>and</u>

Financial Return



- Decrease
 0 & 0
 Costs!
- Decrease
 Haul Road
 Maintenance
 Costs!
- Increase
 Air
 Pollution
 Compliance!
- IncreaseAssetUtilization!



The Future Of Heavy Duty Mine-Road Maintenance is Here!

Haul Road Expenditures can pay BIG Dividends... starting TODAY!

Introducing **EK35**°, the revolutionary <u>NEW</u> patent-pending formulation that can produce hundreds of thousands of dollars in savings by reducing operational costs and increasing asset utilization



EK35° is applied neat to haul road surfaces providing a dual-patent pending mechanism for dust control and soil stabilization. The penetration ability provides a new dust suppressing mechanism, which acts as a durable reworkable binder. **EK35**° works well with all aggregate materials and soil types. It effectively stabilizes deep dust and loose surface materials.

EK35° applications last longer than other ordinary chemical suppressants, therefore requiring fewer maintenance applications. The surfaces are reworkable. This continuously active suppressant is resistant to rain for long periods of time.

EK35° will stop the cycle of roadway deterioration caused by watering, grading, lost aggregate and heavy traffic on mine haul roads. **EK35**° will preserve fines, increase density and maintain the stability of the surface. Along with the road's natural crown, **EK35**° will work to allow better

drainage, reducing or greatly eliminating washboarding, potholing and rutting.

Midwest Industrial Supply, Inc.'s technical service personnel, using our *Samitron*® (Stiffness and Modulus Instrument), derive Young's modulus, shear modulus, CBR and rolling resistance values from in-situ soil stiffness values. These values are obtained using *Samitron*'s® ability to measure the stress imparted to the surface and the resulting surface velocity as a function of time.

We provide general guidelines for estimating and designing the optimum road conditions for higher efficiencies, lower maintenance and fuel consumption.

Revolutionary, Intense Use, Continuous Life Dust Control/Stabilization

On weaker haul road surfaces, the rolling coefficient of friction has an adverse effect on haul truck rolling resistance. Recommended tire pressures may cause shear failures of the surface and deflections in the form of rutting on unstabilized haul road surfaces. These actions extract energy from the wheel motion and cause an increased rolling coefficient of friction. The result is increased O & O costs! Using Samitron® technology and algorithms constructed from testing conducted by the U.S. Corps of Engineers rolling resistance values can be measured, optimized, and monitored for given haul truck tire pressures.

EK35[®] will maintain high density and compaction on the roadway, which will translate into reduced rolling resistance and improved asset utilization. The **EK35**° road "pays" for itself with better efficiency, lower vehicle maintenance, and DECREASED O & O COSTS!



Midwest Industrial Supply, Inc.'s experienced laboratory profes sionals and facilities provide you with comprehensive testing capabilities.

Engineering ServicesMidwest Industrial Supply, Inc. can provide full scale road design and analytical testing that utilizes proprietary design practices as well as testing in accordance with ASTM and AASHTO specifications. Utilizing a fully-equipped

laboratory staffed with experienced professionals, designs can be optimized to achieve customer objectives in the most efficient and costeffective manner possible.

Samitron®

Midwest's Samitron® (Stiffness and Modulus Instrument) can be brought onsite to provide precise measurements before, during and after an



Samitron®

application. This will provide us with objective data for analysis and assurance of realizing project goals.



- Longer Lasting than Ordinary **Chemical Suppressants**
- Works Well with All Soil Types and Materials
- Durable Enough for Tracked and **Chained Vehicles**
- Stabilizes Deep Dust and Heavy Powder
- Works Well on Surface Dust and Loose Surface Materials
- **Requires Fewer Maintenance Applications**
- A Continuously Active **Suppressant**
- Applied Neat <u>NO</u> Water Required
- For Intense Use Traffic Sites
- **Environmentally Friendly**
- Resistant to Rain
- Easy to Apply
- Reworkable

Much of today's haul road maintenance involves an intense schedule of around the clock watering and an ongoing program of grading and materials replacement. Many road materials are difficult to wet with water and water contributes to destabilization and wear of the surface as much as it does to dust control. Dust creates friction that results in wear, which ultimately causes mechanical stress and mechanical failure.

The mechanical drive systems of today's haul trucks challenge haul roads because of better breaking and steering control. As haul trucks travel at higher speeds they challenge haul road design to accept these higher speeds. As haul trucks get wider, haul roads must get wider, which increases haul road maintenance costs. Haul truck utilization must offset increased haul road costs. Road maintenance plays a major role in haulage operations and has a direct influence on truck maintenance costs, road maintenance costs, and owning and operating costs (fuel consumption, tire wear).

An effective haul road maintenance stabilization and dust control program can produce savings from haul truck repair and maintenance. A typical 218 ton haul truck costs approximately \$2.5 million dollars, and over the life of that truck, repair and maintenance costs are projected to be another \$2.3 million. A road maintenance stabilization and dust control program that controls dust can save as much as \$300,000 over the life of each haul truck. Even greater financial benefits are available in reduction of owning and operating costs and improved asset utilization.

EK35° maintains the integrity of the road surface through stabilization and fines preservation. A by-product is elimination of dust. The financial benefits are 1) the reduction in haul truck maintenance repairs, 2) lower road maintenance, 3) eliminated watering expenses, 4) a reduction in owning and operating costs, and 5) increased productivity and improved asset utilization.

Focus On Performance

For over twenty-five years we have been successfully helping to control dust and erosion in various industries. When you consider the alternative "waiting-til-its-broke-to-fix-it", to being pro-active, can you really afford to wait? To find out how we can help you solve your challenges, call one of our sales representatives at **1-800-321-0699** and let's get something going for you!







MIDWEST INDUSTRIAL SUPPLY, INC.

P.O. Box 8431 • Canton, OH 44711 • USA

Telephone: 1-800-321-0699 • Fax: 1-330-456-3247

