

Dust Control



Tackling Dust Emission Challenges

Dust from mining operations can increase maintenance costs, decrease productivity, threaten the health of workers and adversely affect community support and social license to operate. Dow provides a range of solutions to help our customers tackle their dust emission challenges. From dust suppressants to soil stabilization solutions, we can help you control dust emission from mine roads, tailings impoundments, waste rock dumps, stock piles and other exposed surfaces.

The Power of ORE

From increasing cost pressures, to more stringent environmental and safety regulations, to declining ore grades, the mining industry faces numerous challenges impacting profitability. Dow is helping to address these challenges with the Power of ORE – a wide range of products and expertise to address a broad spectrum of mining, mineral processing and remediation challenges.

The Power of ORE gives companies striving to extract more value from mining operations a real choice in the marketplace. Dow can help enable Operational efficiency, boost Recovery enhancement and facilitate Environmental protection.

Dust Control Offerings and Solutions

Dow offers dust management solutions through our PAVECRYL™ series of specially formulated acrylic emulsion polymers to control dust from mine roads, tailings impoundments, waste rock dumps, stock piles and other exposed surfaces. The advanced formulation of the active binding agent offers triple action technology:

- Reduced water surface tension for increased wetting capacity and deeper water penetration
- Enhanced soil water retention
- Optimal bonding and elasticity when applied to fine or granular materials

As a high-performance, water-based concentrate, PAVECRYL products can be easily diluted, while still providing long-lasting retention. Dow also offers a range of surfactants to increase water's effectiveness at settling and suppressing fine particles. Applied as a dust suppressant, Dow's line of PAVECRYL and surfactant products offers the following benefits for your dust control and stabilization needs:

- Improved quality of roads
- Durable, water-resistant surface
- Reduced water consumption
- Enhanced wettability
- Effective at high dilution ratios
- Ease of mixing and use

Dow's History in the Mining Industry

Since our earliest roots isolating compounds from prehistoric brine in the 1890s, to pioneering chemistries for froth flotation processes, to developing innovative technologies for water treatment and reuse today, Dow has continued to innovate to help customers extract more value in the mining industry.

Dow is a world leader in membrane (RO/NF/UF) and ion exchange technologies, and provides a powerful portfolio of chemistries and solutions to address:

- Mine water management, including tailings and waste treatment
- Slurry management
- Dust control
- Grinding and milling
- Flotation and hydrometallurgy, focused on maximizing metal recovery utilizing select chemistries, polymer additives and ion exchange technologies



PAVECRYL™ application at loading yards.



Dust propagation control in loading areas 28 hours after application.



Soil treated with pure water one hour after application. No particle agglomeration.



Soil treated with PAVECRYL after six hours of application. Soil is more compact, with a high degree of fine particle agglomerates.

Commitment to Sustainability

Dow's commitment to sustainability is infused into the very DNA of our Company. In 2006, we launched our current set of 2015 Sustainability Goals, which focus not only on the Company's footprint in our own operations but also our handprint through the positive impact of Dow products and their role in global sustainable development. Focused on addressing global challenges like water, food, climate change and energy, Dow has made significant progress against these goals. For more information on how sustainability is integrated into all aspects of our business and operations, please visit www.dow.com/sustainability.

**Product Stewardship and Safety**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products – from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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