

TAILINGS DAMS SOLUTIONS (TDS2000) IS A UNIQUE ENVIRONMENTALLY FRIENDLY POLYMER-BLEND, USED FOR THE SUPPRESSION OF DUST ON TAILINGS FACILITIES AND LARGE OPEN SOIL AREAS.

TDS2000 was originally developed in 2010 for the FIFA World Cup in South Africa. I-CAT was appointed to eliminate the dust on the active and inactive tailing facilities around Soccer City stadium. The product combined with windbreak netting proved successful, and I-CAT was appointed permanently at the client's sites around the Johannesburg metropolitan area.

The product has since been developed further to offer a cost-effective solution for dust suppression on both active and inactive tailings facilities.



THE PRODUCT

- 🚚 **TDS2000** effectively binds fine materials on tailings facilities to manage harmful dust emissions.
- 🚚 **TDS2000** is an acrylic copolymer combined with environmentally friendly binding agents.
- 🚚 **TDS2000** is easily applied by using spray-on application methods.
- 🚚 **TDS2000** penetrates the soil and forms a porous, durable crust prolonging its lifespan.
- 🚚 **TDS2000** is more effective when used in conjunction with windbreak netting.

TDS2000 IS IDEALLY SUITED FOR:

- 🚚 Open soil areas (un-trafficked).
- 🚚 Tailings facilities (slopes / sidewalls).
- 🚚 Fly-ash dumps.
- 🚚 Berms and road barriers.
- 🚚 Waste dumps.



TAILINGS DAMS ARE A MAJOR SOURCE OF FUGITIVE DUST AT MINING OPERATIONS

Dust on tailings dams is a significant environmental concern stemming from the wind erosion of fine, dry tailings material. These dust particles, potentially containing harmful substances, are carried by the wind, impacting air quality and posing health risks to workers and surrounding communities. Effective dust suppression is crucial for mitigating these environmental and health risks.



GENERAL SPECIFICATIONS

- 🚚 The product application ratio is dependent on the material (soil) and climatic conditions of area to be treated.
- 🚚 The product lifespan is determined by application frequency, climate and soil type.
- 🚚 Wind-break netting is installed in a zig-zag formation to increase the effectiveness of the product.

BENEFITS

- 🚚 Assists in erosion control
- 🚚 Minimizes sedimentation
- 🚚 Minimizes dust pollution
- 🚚 Mitigates health and environmental risks
- 🚚 Supports aspect stability and structural integrity

No Netting with dust

Netting with no dust



ZIG-ZAGGED 'WINDBREAK' NETTING

Windbreak nets reduce the wind velocity by approximately 35%, thus reducing dust generation, erosion and moisture evaporation. A windbreak netting system is used to reduce wind speeds and direct airflow, reducing the ability for winds to generate dust from open soil areas. It is usually made of polyethylene or polypropylene, a durable fabric reducing dust generation. The 'zig-zagged' pattern is effective to reduce wind speeds further.



ECO SUSTAINABLE PRODUCT
100% Environmentally Friendly