

ECO Dust Control - Technical Data Sheet

Water-based PVAOH solution for dust suppression and superficial stabilisation.

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Water-based formulation. Polyvinyl alcohol (PVAOH/PVOH, CAS 9002-89-5) is the only declared functional polymer.

Technical status

Reference technical information for project screening. Batch properties, dosage, application and acceptance criteria must be confirmed before supply or use.

1. Product description

ECO Dust Control is a water-based formulation with PVAOH as its only functional polymer. It is designed to wet and bind fine particles, reduce dust emissions and support a more stable surface after drying.

2. PVAOH function

During application, water supports distribution. As the surface dries, PVAOH acts as a binder and film-forming polymer that helps hold fine surface particles together. Performance depends on material, moisture, compaction, traffic and climate.

3. Intended applications

- Site and mining roads
- Yards, stockpiles and manoeuvring areas
- Tailings and slopes with runoff controls
- Assessed loading, unloading and transfer points
- Industrial areas exposed to particulate matter

4. Reference properties

Property	Available information	Status
Chemical family	Water-based polyvinyl alcohol PVAOH/PVOH formulation	AEI declaration
Only functional polymer	PVAOH/PVOH, CAS 9002-89-5	AEI declaration
Physical state	Aqueous liquid	General reference
Colour, pH, density, viscosity and solids	Not determined in this document	Confirm by formulation and batch
Water compatibility	Dispersible / soluble according to PVAOH grade and formulation	Validate with project water
Flammability	Not expected to be flammable because of the aqueous base	Confirm on finished product

5. Application assessment inputs

A recommendation is prepared after reviewing:

- Material, grading, fines content, moisture and bearing condition

- Area, slope, traffic, axle loads and operating continuity
- Dust baseline, current water use and verification method
- Preparation, drainage, climate, curing and runoff controls
- Mixing, spraying, recirculation, storage and containment equipment

6. Application framework

1. Assess

Document the surface, dust sources, traffic and acceptance criteria.

2. Prepare

Grade, correct weak areas and establish the approved damp condition without flooding.

3. Condition

Homogenise and dilute only with compatible water under the approved project method.

4. Apply

Distribute uniformly with calibrated equipment while preventing pooling and runoff.

5. Cure

Restrict heavy traffic during the initial project-defined curing period.

6. Monitor

Record area, quantity, weather, traffic and performance before maintenance or scaling.

7. Dosage and coverage

No universal dosage is assigned. Concentration and consumption must be defined through a controlled site assessment and trial. Do not use historical ranges as a contractual specification without validating the formulation and project conditions.

8. Handling, storage and environment

- Use gloves, eye protection, work clothing and slip-resistant footwear
- Avoid ingestion, eye contact and unnecessary spray mist
- Keep concentrated product out of drains, wells and waterways
- Store closed, under cover and protected from freezing, heat and contamination
- Confirm shelf life, storage temperature and packaging for the supplied batch

9. Limitations

- Does not replace structural design or correct failed, saturated or pumping layers
- Do not apply in heavy rain, on flooded surfaces or without runoff controls
- Do not use for food, medical or potable-water purposes or outside the approved scope
- Do not promise one duration or maintenance interval without a field trial and monitoring

10. Document control

Version 2.0 aligns the declared polymer family for Dust Control and ECO Dust Control. PVAOH/PVOH is the only functional polymer. This sheet does not replace the current SDS or the project application specification.