



Dust & Fire Suppression products



Fully environmentally safe product set

Non-petroleum organic substance

Bio-degradable, non-toxic

VERY cost-effective



Nano Series Products

- **FEATURES** across all Nano-series products:
- Made from **locally sourced, non-petroleum, organic** substances
 - A natural polymer, sustainably sourced from commonly grown crops
- **Fully environmentally friendly**
 - Non-toxic to humans, animals, birds, vegetation or water life
 - 100% Enviro-friendly, Non-corrosive
 - Fully Bio-degradable, soil friendly
- **Highly miscible formulations**
 - Easy to mix with water for application
 - The concentrate stores for long periods without settling
 - Apply with virtually all spray/misting mechanisms
 - Washes off plant and equipment easily with water
- **Effective at low concentrations**
 - Generally: **1L to 1000L water** for dust and capping
 - Fire: mix is varied according to fire situations



Nano series - Value for customers



- VERY cost effective:
 - Probably the best on the market at present for **'cost per square metre, per month'**
- Enhances the ability of water to suppress dust and fire:
 - Saves significant amounts of water usage in Dust Management and Fire Suppression operations, in general (up to 70% savings)
 - Effectively binds the soil & substrates; from very fine particles (clay dust) to rocky gravels
- Applicable and effective for most Dust Suppression needs:
 - High traffic roads and active open areas, bush and grassy areas
 - Tailings dams; both active (hydro-mining) and passive/final tailings capping
 - Ideal for dirt airstrips and rural/farm roads, truck yards
 - Mining processes from loading, hauling, crushing, stockpiles etc
 - SponCom applications
- Suitable for most fog cannons, misting devices and spray equipment
 - Does not clog or damage fine spray application systems and irrigation equipment
 - Generally acts as a lubricant and equipment lasts longer



Product Range

NanoBlock (Opaque Pink or White)

NanoBindM3 (Opaque Blue)

NanoRAP (Opaque Yellow)*

NanoFire (Red)*

* in final development, testing & verification

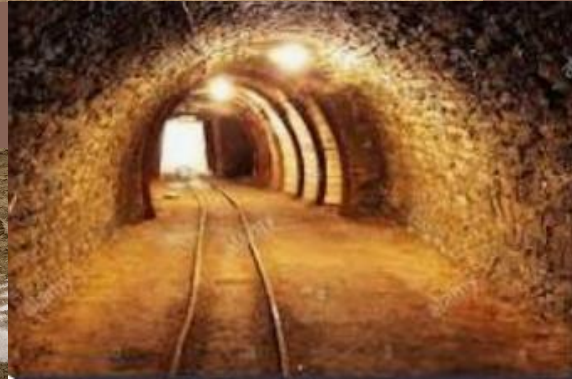




NanoBlockTM



- 645XA - an Opaque white liquid concentrate*
- 850XA – an Opaque Pink liquid concentrate*
- 850XAG – an Opaque Green liquid concentrate*



The original product set, coloured to client needs, suitable mainly for natural gravel surfaces found on rural roads, haul roads, construction roads, airfields.



NanoBindM3TM



850NBX - an Opaque Blue liquid concentrate

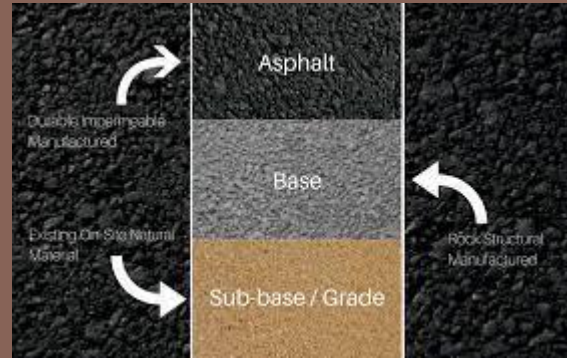
An enhanced performance product, suitable for more challenging rough gravel/sandy and artificial surfaces like imported crush haul roads and long-term tailings capping.

* - may require a sub-product number



NanoRAP

TM



******* - an Opaque yellow liquid concentrate**

An enhanced performance product, specifically designed to penetrate and increase the **bind** in **Recycled Asphalt Paving (RAP)** and ensure an environmentally friendly, more robust & durable surface.





NEWS
Explosion at Turkish Hard Coal's underground mine in Turkey kills 41



TM

NanoFire



******* - an Opaque Red liquid concentrate**

An enhanced, very cost-effective fire suppressant, specifically designed and certified for quick and effective suppression of all fire types, besides electrical. Effective in suppression of **SponCom**

Marketing contact details



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First coat to dry surface within 2 seconds



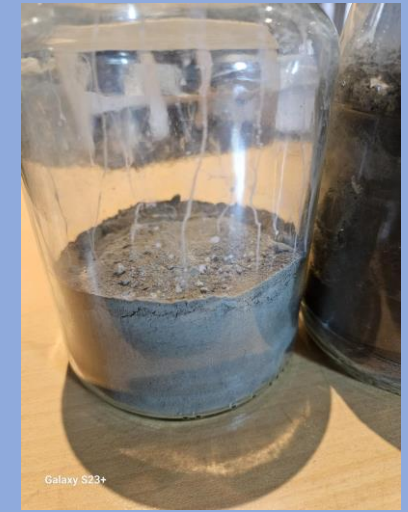
Second coat after 30mins



Third coat after 1 hour



Penetration after 1 hour



After one day, dried surface



A new, deeper sample with three coats applied - also the next day after drying,

Note:

- *Top layer is Nano-polymer particles

- * Surfactant penetration deeper than nano-polymer layer

Mining costs rising

Inflation Hits Miners, Exposure to Oil to Blame

According to new research from Costmine, it has never been more expensive to operate or build a mine. However, not all costs are rising equally. Michael Sinden, Vice President of Metals & Mining Research at Costmine, presented inflation data at the 2022 Canadian Mining Symposium in London, showing that mining operational and capital expenditures are reaching 20-year highs.

