

GLOBAL DUST SHIELD

THE GLOBAL LEADER IN DUST
SUPPRESSION SOLUTIONS



SandShield

CoalShield

SaltShield

Executive Summary

Desertification and the related sand and dust storms are a huge cost to people's health, economic activity and the environment.

- Global Dust Shield is an Australian company that has developed world first dust suppression technology
- The SandShield product is perfectly suited to arid environments. It halts sand storms while enabling vegetation and wildlife to flourish.
- Used as part of a comprehensive land care plan, SandShield reduces the worst effects of land degradation and supports its recovery

HOW WE WORK

We start our programmes with a pilot phase, where we demonstrate our capabilities in an agreed sample area.

From there we work with you to rapidly develop and execute a plan that expands the programme to maximise benefits at scale.

Sand storms in the Middle East

They result in huge, ongoing costs to people's health, the economy and the environment



- Poor air and water quality
- Lost industrial & agricultural productivity
- Desertification

Until now, solutions have not only been ineffective, they have created more problems

An example is attempting to stabilise dunes with oil mulch.

- Extremely toxic
- Flammable
- Environment destruction



Our SandShield solution halts shifting sands while supporting growth in natural vegetation and wildlife



The liquid product is easily and quickly applied as a spray. It can be dispersed by machine, vehicle or hand-held methods.

The result is stabilised sand dunes that can withstand exposure to winds of up to 180kph.



Because SandShield is non-toxic, you get successful land revegetation that helps reduce sand-storms long term



SandShield works by forming a surface crust for wind protection that still allows water and vegetation through



SandShield forms a crust on the surface which is easily broken back into small particles.

It allows water tension to brake on the surface, so water continues to pass through the protective crust.



Reptiles, insects and other animals to borrow through the sand surface and seek shelter in their natural habitat and environment.

Test Details

Test Report Number	C11189-7	Test Performed by	Tim Sallai
Test Date	17 April 2012	Report Checked by	Don Zhao
Type of Test	Client Product Evaluation	Reference Instruction	WT-021

Reference Equipment Used

Instrument	Ecotech ID	Serial Number	Cal. Report No.	Cal. Due Date
Pitot-static Tube	TE-0486	2007B		1/05/2017
Pressure Transducer	TE-0438	4804763	APL115407	26/08/2012
RH/Temperature Transducer	TE-0393	Y43400020	33884N	16/08/2012
Barometer	TE-0396	T4440005	APL115405	26/08/2012

Test Sample Details

Sample ID	S2	Description	Sample board with cone-shaped coated mound
Dimensions	Board: 390 mm x 430 mm x 12 mm	Mound: diameter 310 mm x height 95 mm	

Client Details

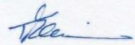

Report Client	Alphalast Pty Ltd	Phone	(03) 9416 9866
Client Address	110 Bell Street, Preston VIC 3072		


Test Environmental Conditions

Test Environmental Conditions		Test Results		
Ambient Temperature (°C)	22.5	Stable Wind Speeds	44.5	Remark Sample remained intact for duration of test
Relative Humidity (%)	58.5	Attained (kph)	76.3	
Barometric Pressure (hPa)	1017.6		107.8	

Notes:
The uncertainty is ±2% of reported wind speed readings. The reported measurement uncertainty is the expanded uncertainty at 95% confidence level, and a K coverage factor of 2 unless otherwise stated.

The results of the test, calibration and/or measurements included in this document are traceable to Australian national or international standards.

Tested:  **Company Seal:** 

Checked: 

Date: 19/04/2012

This document is issued in accordance with ISO/IEC 17025 requirements. It shall not be reproduced, except in full, without written approval of the laboratory.

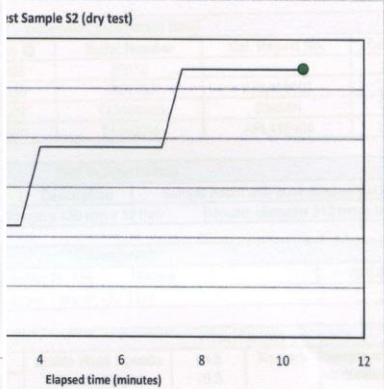
Successful independent tests have been conducted by Australia's most senior scientific agency (CSIRO) on the effectiveness of SandShield.

Alphalast Test Sample Wind Tunnel Report

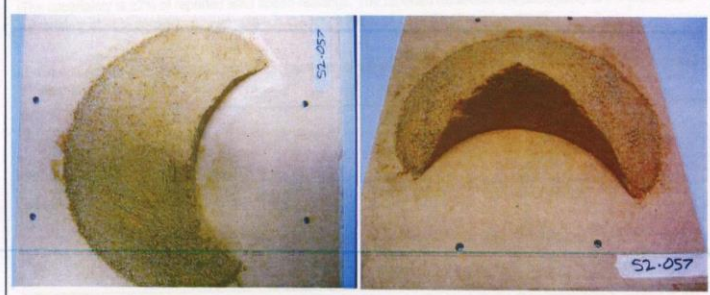
Test Graph

C11189-7	Sample ID	S2
----------	-----------	----

Test Sample S2 (dry test)



Sample Photographs



About Global Procurement International (GPI)

As an investor and distributor for innovative environmental solutions, GPI supports the growth around the world of its partner companies:

- Global Dust Shield
- MultiGen Solutions

Global Dust Shield

The expert team that formed Global Dust Shield joined forces in 2013 to form the company.

Since then Global Dust Shield has conducted intensive Research & Development with a commitment to solving environmental problems and creating innovative products that:

- Address the detrimental environmental impacts affecting communities and businesses
- Help improve the sustainability and profitability of infrastructure by meeting tough environmental challenges

Global Dust Shield Pty Ltd is the developer and owner of “SandShield”, “CoalShield” and “SaltShield” technologies.

These products are specifically developed dust suppressant products designed to help nations, agricultural communities, urban communities and industries break the cycles of migrating fugitive desert sands, coal dust & salt dust.

MultiGen Solutions <http://multigensolutions.com.au/>

MultiGen Solutions has developed a suite of solutions that harness the moisture that is available in the atmosphere to generate clean drinking water and to support agriculture.

MultiGen's Air Water generator works with diesel generators, microturbines, or other heat sources to produce cooling/refrigeration and water from the atmosphere.



Working with DewPonics, MultiGen has developed a modular Agriculture System that accelerates and controls the growth of plants by chilling the plant roots in warm humid climates.