



Oshenite™ | pure from the ocean

Blown Film comparison testing conducted October 2011 indicates adding Oshenite™ at 20% or more reduces energy required to process

Preliminary results from 3rd party independent research indicate strong potential to use Oshenite™ at up to 40% and documents product enhancement levels.

Top line findings show that product stiffness was increased by 81% with only a 6% reduction in extension at break. Furthermore there appears to be a synergistic effect at 30% Oshenite™ in all mechanical properties. Adding Oshenite™ at 20% or more reduced the energy required to process the film.

Oshenite™ application is an important step in offering a product sourced from a renewable resource with energy saving attributes.

This report prepared by U.S. Aragonite Enterprises, [suppliers of Oshenite™](#).

For more information contact: reports@oshenite.com or refer to the on independent 3rd party research top line results report attached.



A Blown Film Comparison of Virgin LDPE film with
Oshenite™ LDPE film
Conducted by independent 3rd party October 2011

Test: Energy to melt (w/g)

Results: Loaded with 30% Oshenite™ master batch, 11% decrease
Loaded with 40% Oshenite™ master batch, 22.3% decrease

Test: Melt Flow Index (g/10 min)

Results: LDPE, .80
20% Oshenite™ content, 1.20
30% Oshenite™ content, 1.50
40% Oshenite™ content, 2.00

Test: Tensile Modulus of Elasticity (Mpa)

Results: LDPE, 210
20% Oshenite™ content, 320
30% Oshenite™ content, 360
40% Oshenite™ content, 390

Test: Peak Tensile Strength (MPa)

Results: LDPE, 13.4
20% Oshenite™ content, 13
30% Oshenite™ content, 13.5
40% Oshenite™ content, 12.9

Test: Extension at Break (mm)

Results: LDPE, 80
20% Oshenite™ content, 75
30% Oshenite™ content, 80
40% Oshenite™ content, 75

Summary

Strong potential to use up to 40%
At 40% only a 6.9% reduction of strength
Stiffness increase by 81% while only 6% reduction
in extension at break
Appears to be a synergistic effect at 30% Oshenite™
In all mechanical properties
Adding Oshenite™ at 20% or more reduces energy required to process