Ecobeads Cause Less Disruption to Skin Barrier Function Than Polyethylene Particles or Apricot Shells When Used in an Exfoliating Facial Scrub

Objective:
To evaluate Ecobeads within a facial scrub for their potential to cause less of an increase in TEWL (transepidermal water loss) during a mechanical exfoliation process, as compared to polyethylene particles or apricot shells (a natural polyethylene alternative) within the same facial scrub.

Method:
TEWL measurements (via Tewameter) were taken on the volar forearms at baseline prior to exfoliation and 30 minutes post-exfoliation. Increases in TEWL indicate reduced skin barrier function as a result of the mechanical exfoliation process.

Results:
Ecobeads caused less disruption to skin barrier function than polyethylene particles or apricot shells.

Vehicle (%wt/wt): Water (47.8%), Ammonium Laureth Sulfate (14.5%), Cocamidopropyl Betaine (13.0%), Distearyl Phthalic Acid Amide (4.5%), Cetyl Alcohol (4.0%), Stearyl Alcohol (4.0%), Butylene Glycol (2.0%), PEG-120 Methyl Glucose Dioleate (2.0%), Sodium Hydroxide (and) Water (15% solution) (0.9%), Citric Acid (30% solution) (0.8%), Phenoxethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (and) Isobutylparaben (0.5%), and Disodium EDTA (0.05%).