

Barnet Products Corporation 140 Sylvan Avenue Englewood Cliffs NJ 07632  
Tel 201 346 4620 Fax 201 346 4333 Web barnetproducts.com

## Ultrasomes

- Post Exposure Sun Damage Recovery
- Immune Protection Functionality

### DESCRIPTION

Ultrasomes are UV-endonuclease enzymes encapsulated in multilamellar liposomes. Endonuclease is prepared from *Micrococcus luteus*. The liposomes (200 nanometers) are formed from pure and all natural egg phospholipids.



### PROPERTIES

Natural DNA repair activity for humans is facilitated by endonuclease, which is the enzyme in Ultrasomes. Endonuclease recognizes UV damage and is reported to accelerate its repair four-fold. Ultrasomes also protect the immune system by repairing UV-DNA damage and reducing the expression of TNF  $\alpha$ , IL-1, IL-6 and IL-8.

Interestingly, Ultrasomes also stimulate the production of melanin by melanocytes in the tanning response following UV exposure. A dose-dependant response has been observed *in vitro*.

### FORMULATION

Ultrasomes is a translucent suspension with a pH of 7.0 - 8.0. Suggested use level is 1%. Since light activation is not required, Ultrasomes can be used in nighttime skin care products. They are compatible with hydrogels, carbomers, emulsifiers, triethanolamine, dimethicone, sunscreens & sun blocks and phenoxyethanol; incompatible with anionic or ionic detergents and surfactants, 5% ethyleneglycol, glycerin or alcohol. Preservative: 1% Phenoxyethanol.

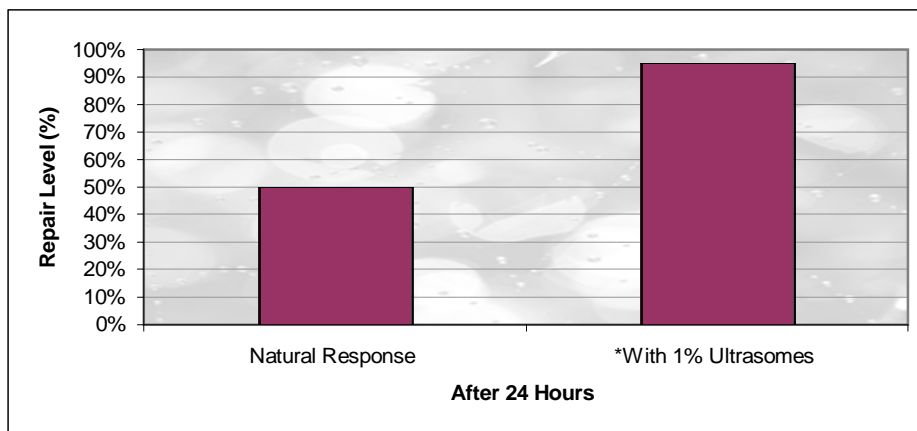
### LEGISLATION

INCI Name: Micrococcus Lysate  
CAS: 158765-79-8

JMHW: Submitted  
EINECS: 295-793-5 Micrococcus tetragenus Lysate  
295-786-7 Lecithin  
231-791-2 Water

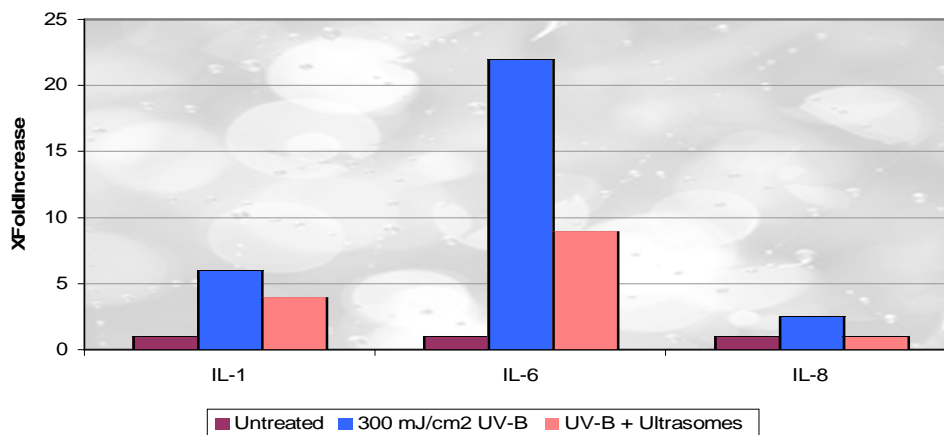
# Ultrasomes

## ULTRASOMES ENHANCE DNA REPAIR IN HUMAN CELLS

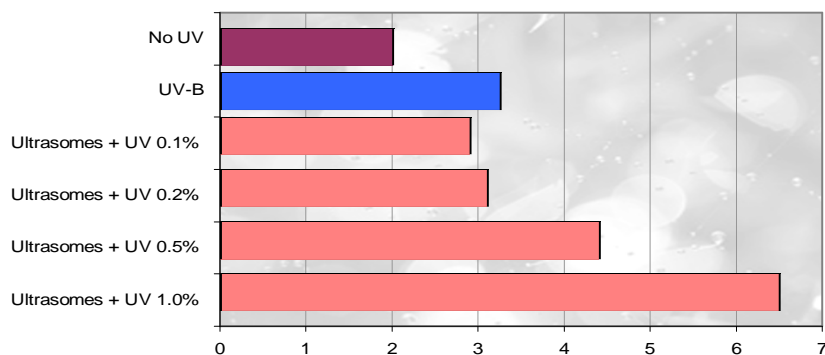


## ULTRASOMES AND IMMUNE PROTECTION

### Reconstituted Human Epidermis (Skintech) UV-B + Ultrasomes, Assayed for Cytokine Release by ELISA



## ULTRASOMES ACTIVATE MELANIN ACTIVITY



Ultrasomes > 0.5% + UV-B (Red) stimulate cellular melanin compared to cells treated with only UV-B (Blue)