# shield



You use sunscreen regularly to protect your face and body, but what about your scalp? Effective UV protection is easy with a few sprays of scalp-ol-o-gy shield.

Shield is an SPF30 mist with a unique, light formulation featuring reef-safe UV filters. It protects with a dry, non-sticky feel.

Protect your scalp with scalp-ol-o-gy shield.



# **Technology**



## AMP-ULTRA®PC 2000

An efficient neutralizer that aides in the stabilization of emulsions and prevents discoloration of the product.



### ACULYN™ 38 Polymer

An excellent suspending agent/rheology modifier for smooth-pouring personal care formulations such as conditioning shampoos with silicones, anti-dandruff shampoos with zinc pyrithione, exfoliating body washes, and sunscreens. Supports formulations that are mild, soft, non-greasy and non-sticky without feeling watery upon skin contact.

## DOWSIL™ FA 4003 DM Silicone Acrylate

A flexible silicone acrylate film former for color cosmetics and sun care applications providing excellent water/sebum repellency, film integrity and rub-off resistance. Also offers SPF boosting and anti-pollution claims.



## Parsol® 1789

The most-used UVA organic sunscreen in the world and the only approved broad spectrum UVA organic sunscreen in the USA. It enables broadband protection when combined with effective UV-B filters, and can also boost SPF values.



#### LexFilm™ Sun Natural MB

A 100% plant-based, multi-dimensional polymer for sun care applications. Derived entirely from renewable and sustainable building-blocks, NSF and COSMOS certified.



## Versagel<sup>®</sup>SQ 500 T

A squalane-based product with anti-aging properties including improvement in skin elasticity, skin smoothness, and reduction of wrinkles. Also provides superior moisturization and suspension properties.

## Use

Spray directly onto exposed scalp, and along hair partings before spending time outdoors. Use fingers to rub and distribute evenly as needed.

# Frequency

Daily. Reapply as needed when outdoors



PHASE	INCI	WT%	TRADE NAME	SUPPLIER
Α	Water	48.30	Water	
	Acrylates/Vinyl Neodecanoate Crosspolymer	3.00	ACULYN™ 38 Polymer	Dow
В	Octocrylene	7.00	Parsol® 340	DSM
	Avobenzone	3.00	Parsol® 1789	DSM
С	Octisalate	5.00	Parsol® EHS	DSM
	Homosalate	12.00	Parsol® HMS	DSM
	Potassium Cetyl Phosphate	3.00	Amphisol® K	DSM
	Capryloyl glycerin/sebacic acid copolymer	5.00	LexFilm™ Sun Natural MB	Inolex
	Heptyl Undecylenate	5.00	LexFeel™ Natural	Inolex
	Squalane, Ethylene/Propylene/Styrene Copolymer, Butylene/ Ethylene/Styrene Copolymer, Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamate	3.00	Versagel®SQ 500 T	Penreco
	Dimethicone, Acrylates/Polytrimethylsiloxymethacrylate Copolymer	5.00	DOWSIL™ FA 4003 DM Silicone Acrylate	Dow
D	Aminomethyl Propanol	qs	AMP-ULTRA®PC 2000	Angus
	Sodium Benzoate	0.50	Kalama®Sodium Benzoate	Emerald
	Fragrance	0.20	Beach Bum	Orchidia
		100.00		

#### **PROCEDURE**

PROPERTIES pH: 5.5-6.0

Phase A: Mix Phase A ingredients together well, heat to 75°C.

Phase B: In separate vessel premix Parsol 340 and Parsol 1789, heat to 75°C.

Phase C: In separate vessel mix Phase C ingredients together in order, heat to 75°C. Add Phase B to Phase C and let mix at temp for 10 mins.

Add Phase B&C to Phase A with mixing at 75°C for 10 mins. Remove from heat, cool to 40°-45°C.

Phase D: Test pH, range 5.5 to 6.0, adjust accordingly. Add remaining ingredients to main vessel.

