

Sun Rays : Environmental Conditions & Phototypes



Solar Spectrum:

- **Photon flux**
- **3 types of rays: Infrared (IR: invisible, create heat/ Visible Rays (visible light, colours, glare) / Ultraviolet (UVA, UVB, and UVC – short wavelength)**
 - Ultraviolet light causes cellular damage, sunburn, premature aging of the skin (even skin cancer in the medium term)
 - They cause ophthalmia and cataracts

THE MOUNTAIN ENVIRONMENT IS SPECIFIC AND EXTREME

- **Refraction: Snow 40% to 90% - Sand 5% to 25% - water 10% to 30%**
- **High Altitude: Cold, snow, wind, and dry air.**
This environment **amplifies the intensity of the rays and accentuates aggression and dehydration of the skin**

The different photo-types of skin:

I: Very light and pale white skin- always burns, never tans

II: Light White Skin -burns easily, tans minimally








III: Medium Light Brown Skin -burns moderately, tans uniformly

IV: Medium Brown Skin -burns minimally, always tans well

V: Dark Brown Skin- rarely burns, tans profusely

VI: Dark Brown to Black Skin -never burns, deeply pigmented

Choice of SPF Factor

Choix selon votre type de peau et l'exposition / Choice depending of your skin and sun exposure			
Type d'exposition / Exposure	 Exposition modérée Moyenne Montagne, Plaine <i>Moderate exposure Medium Mountain</i>	 Exposition Importante Montagne, exposition longue <i>High exposure Mountain, long exposure</i>	 Exposition Extrême Glaciers, Tropiques <i>Extreme exposure Glacier, Tropics</i>
Type de Peau / Skin			
 Peau extrêmement sensible au soleil <i>Extreme sun sensitive skin</i>	SPF 30-50 Haute Protection <i>High Protection</i>	SPF 50 + Très Haute Protection <i>Very High Protection</i>	SPF 50 + Très Haute Protection <i>Very High Protection</i>
 Peau sensible au soleil <i>Sun sensitive skin</i>	SPF 15-20-25 Moyenne Protection <i>Medium Protection</i>	SPF 30-50 Haute Protection <i>High Protection</i>	SPF 50 + Très Haute Protection <i>Very High Protection</i>
 Peau intermédiaire (bronzage progressif) <i>Intermediate skin (tans progressively)</i>	SPF 6-10 Faible Protection <i>Low Protection</i>	SPF 15-20-25 Moyenne Protection <i>Medium Protection</i>	SPF 30-50 Haute Protection <i>High Protection</i>
 Peau assez résistante (bronzage facile) <i>Fairly sun resistant skin (tans easily)</i>	SPF 6-10 Faible Protection <i>Low Protection</i>	SPF 6-10 Faible Protection <i>Low Protection</i>	SPF 15-20-25 Moyenne Protection <i>Medium Protection</i>

Source : Recommandations AFSSAPS (désormais ANSM) - Juillet 2011