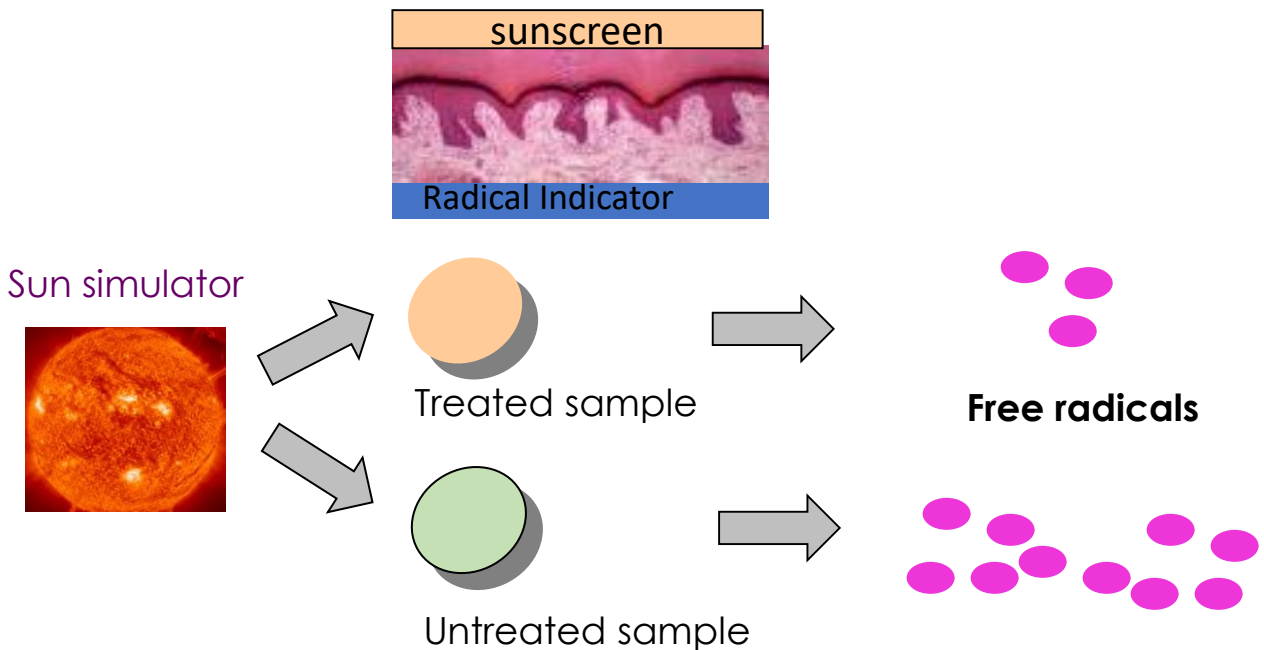


RSF

Radical Skin Protection Factor

- ☒ Measures the free radical amount inside skin during UV radiation by ESR (Electron Spin Resonance) spectroscopy .
- ☒ Measures the protective effect of UV filters and radical scavengers.
- ☒ Measures the influence of topical applied formulations/raw materials on the amount of inducible free radicals inside the skin.
 - ☒ Pre-screening of sunscreens
 - Photostability tests
 - Influence of formulations on the Radical Status
 - Claim Support studies



Test Products:

Cosmetic formulations containing UV filters and/or actives
Nota Bene: a placebo formulation is required.

Principle:

ESR spin trapping technique in skin.

Conditions:

Measurements are performed at RT. Fresh pig skin biopsy samples, 1 cm²

Kinetic measurements 0-5 min.

Concentration: t.q. 2 mg/cm²

Application time: 20 min.

Calibration curve constructed using optical density filters (attenuators) and standards

UV-radiation: 300 W Newport-Oriel UV- sun simulator

(23,5 W/cm² UVB, 180 W/cm² UVA)

Patent: DE102006023364A1