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COLIPA IN-VITRO METHOD UVA-PF DETERMINATION

AMA Ref. No.: MS11.COLIPA.UVA.INVITRO.M0355.DPS

Date: May 2, 2011

Sponsor: Deutsche Pharma S.A.
LA CONCEPCIÓN N° 56
PROVIDENCIA, SANTIAGO
CHILE

Sample Description: On April 28, 2011 one test sample labeled SUNWORK Gel 191041M, was received from Deutsche Pharma S.A. and assigned AMA Lab No.: M-0355.

Upon arrival at AMA Laboratories, Inc., the test material is assigned a unique laboratory code number and entered into a daily log identifying the lot number, sample description, sponsor, date received and tests requested.

Samples are retained for a period of three months beyond submission of final report unless otherwise specified by the sponsor or if sample is known to be in support of governmental applications, in which case retained samples are kept two years beyond final report submission.

Sample disposition is conducted in compliance with appropriate federal, state and local ordinances.

Study Objectives: The sample (AMA Lab No.: M-0355; Client No.: SUNWORK Gel 191041M) was evaluated according to the method described in the publication: *In-vitro* Method for the Determination of UVA Protection provided by Sunscreen Products Guideline 2009 (COLIPA) using Labsphere's UV-2000S Benchtop Sunscreen Analyzer. The long-arc xenon Atlas Suntest™ insulator, type CPS+, filtered with its original UV short cut-off filter (Ref: 56052388) combined with the "UV Special Glass" filter (Ref: 56052371), providing a VIS+UVA+UVB spectrum was used as UV source of the sunscreen sample irradiation. A water-cooled sample tray (ATLAS Material Testing Technology GmbH (Atlas No. 56052389)) was used for effective cooling of the samples. Treated PMMA plates were placed on a non-reflecting surface during UV exposure.

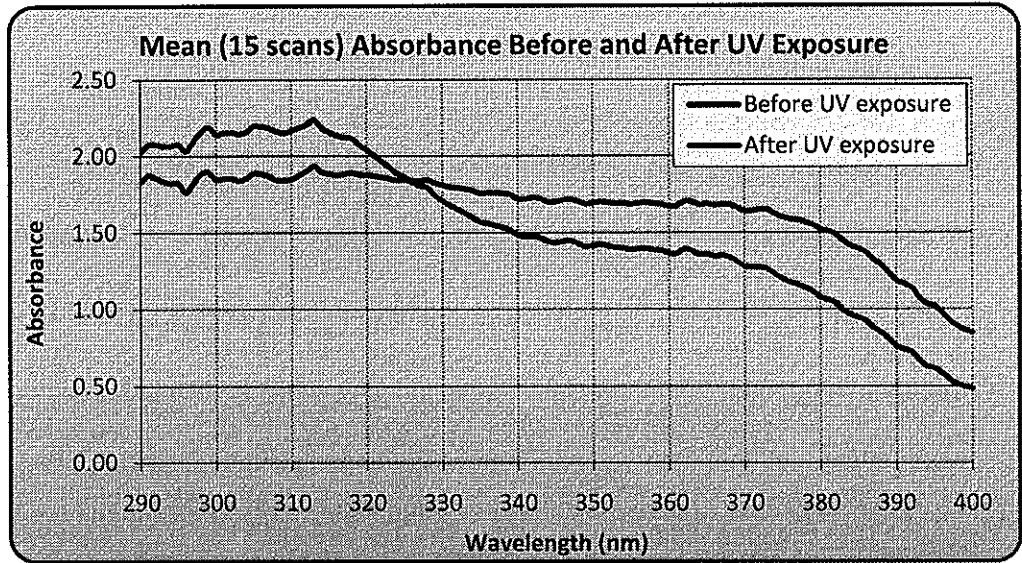
Archiving: All original samples, raw data sheets, technician's notebooks, correspondence files, copies of final reports and remaining specimens are maintained on the premises of AMA Laboratories, Inc. in limited access marked storage files. A duplicate DVD copy of final reports is separately archived in a bank safe deposit vault.

Substrate: PMMA HD 2µm Plates
Manufacturer: HeliosScreen Laboratoire
Designation: HD2 2009 000012; Batch: PP-02101-000
Beginning Manufacture: 04/27/09; End Manufacture: 04/28/09

Results:

Colipa In-Vitro UVAPFDx: 21
UVAPF C.V. %: 4.7% (limit 20%)
Critical Wavelength: (requirement: minimum 370 nm)
 Pre Irradiation: 384.000 nm Post Irradiation: 378.667 nm
Ratio (SPF in vivo/UVAPF): 2.9

Proposed in 2009 Colipa Guideline In-Vitro UVA-PF method by taking into account pre-irradiation step compensates for any photo-instability in the tested sunscreen product. The photo-stability of a test product is determined by measuring the absorbance before and after exposure to a solar simulator. According to Colipa In-Vitro UVA-PF method the test product (AMA Lab No.: M-0355; Client No.: SUNWORK Gel 191041M) is considered photo-stable.



Additional Statement regarding E.U. Requirement:

UVAPFDx / Measured SPF (In Vivo): 0.350 [PASS] (requirement: minimum 0.333)

The sample (AMA Lab No.: M-0355; Client No.: SUNWORK Gel 191041M) meets the requirements as described in the Official Journal of the European Union 26th September 2006.

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