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Editorial

The long story of HelioScreen reaches the 20th years.

Despite some great improvements in the field of the sun protection evaluation, the way is still long to reach an end. I am very proud of the work the company has provided with innovation on materials and methods. The most difficult was not to get reliable technical solutions to the problem but to make them adopted as nothing can be done without.

May be in the future people will not remember that majority of what is proposed today has been innovations from our laboratory. Clearly there are publications which allow to remind but the most important is the goal.

During the last 20 years, our goals and our convictions have never been changed. We grew slowly but strongly. We remain a quite small company but very famous and recognized all over the world in our field. That is fine for me.

For the next 20 years and afterwards just hope it will be the same to excellence.

Dominique Lutz, CEO Scientist Manager

Congress & Events

in-cosmetics® global

Paris • 2-4 April 2019

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**We invite you to join us during
in-cosmetics Global in Paris booth Q87
to share a glass of good cheer
April 2nd and 3rd at 5:00 PM**

HISTORY OF HELIOSCREEN

INTRODUCTION

Since 1999, HelioScreen is the laboratory specialized in the In Vitro evaluation of sun protection in cosmetic products such as SPF, UVA-PF, Critical Wavelength, Water Resistance, Wet Skin and many methods.

Forerunner in In Vitro solar testing, HelioScreen is involved in setting standards and methods worldwide. For example, we developed robotic spreading, reproducible PMMA substrates, in vitro SPF with multi-substrates approach, in vitro Blue Light and Infrared protection assessment and many innovations. Moreover, traceability is guaranteed by our quality system and remains a permanent commitment of our company. As a pioneer in the field, we put at your service our scientific expertise acquired throughout these years of practice and recognized internationally.

20 years from the beginning of HelioScreen and we are proud of this journey... Since 20 years, we are involved in in vitro sunscreen testing and we continue to improve our knowledge and expertise in this field day after day. Since 20 years, we created a strong relationship with our customers and partners and we continue in this way with honesty.

Here after, have fun to look at pictures from our team and (re)discover our history.

HelioScreen History

HELIOSCREEN'S LABORATORY



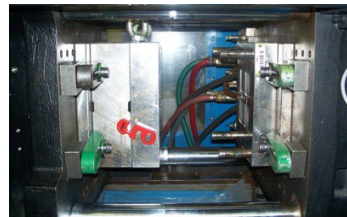
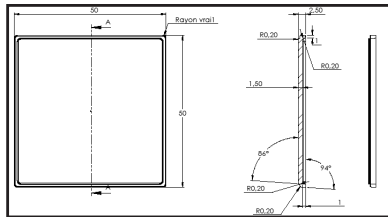
BEFORE



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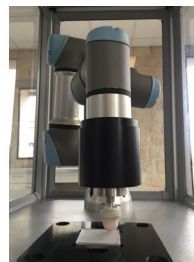
- 1999 - Dominique Lutz founded the Helioscience Cosmétique laboratory for In Vitro sunscreen testing
- 2003 - Starting of globalization (agents and partners worldwide)

OUR MOLDED PMMA HELIPLATE HD6



- 2007 - Helioscience becomes HelioScreen
- 2008 - Publication of In Vitro Water Resistance
- 2008 - Heliplate PMMA HD6 (molded)

HELIOSCREEN ASIA'S LABORATORY



- 2010 - Quality system certified Bureau Veritas Certification ISO 9001
- 2011 - Reference plate HD0 & S2 standard
- 2012 - Member of the ISO expert group for sun protection evaluation methods

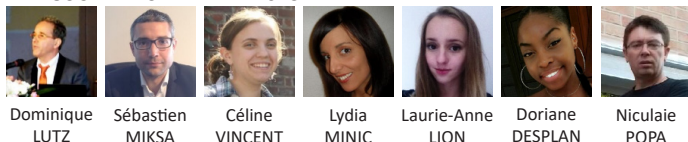
IN VITRO
SUNCARE

OPEN DAYS 2016
JOURNEES PORTES-OUVERTES 2016



- HelioScreen Asia Co., Ltd. creation (joint-venture with Thai Chemo)
- 2013 - Publication of In Vitro Comparison method for Quality control
- 2014 - Appliance HD-SPREADMASTER (robotic spreading)
- Appliance HD-THERMASTER (temperature control)
- New reproducible Heliplate SB6 (sandblasted)
- 2015 - Publication of the In Vitro SPF multi-substrates approach
- Publication of in vitro methods for Dynamic Photostability, Wet Skin Application and Rub Resistance
- 2016 - In vitro Suncare Open Days

HELIOSCREEN'S TEAM IN 2019



Dominique LUTZ Sébastien MIKSA Céline VINCENT Lydia MINIC Laurie-Anne LION Doriane DESPLAN Niculaie POPA

- 2017 - Publication of in vitro methods for Blue Light protection, Infrared Protection and Extreme conditions
- 2018 - Publication of in vitro method for Full Spectrum protection
- Starting development of in vitro methods for Long Lasting and Sweat Resistance
- 2019 - HelioScreen celebrates 20 years birthday!

And already, the future
is assured!

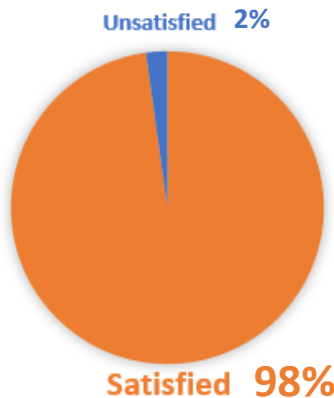


CUSTOMER SATISFACTION SURVEY

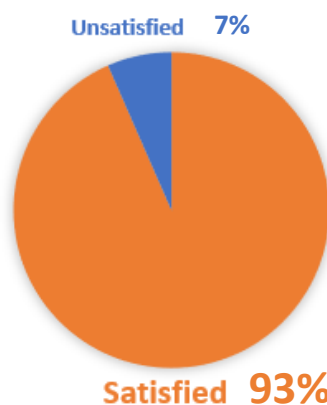
The feedback from our customers is important for us and allows us to improve our system, our policy and our services/products.

Therefore, here below you will find the feedback in 2018 from the 101 satisfaction questionnaires.

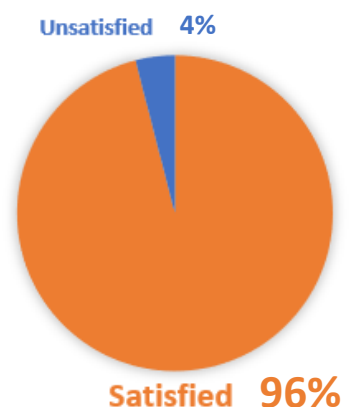
IN VITRO TESTING SERVICE



CONSUMABLES SERVICE



COMMERCIAL SERVICE



In complement, we also consider with importance our customers and partners' opinions.

Here below, you can read some of them.

“ Très bonne réactivité
lors des demandes, des
conclusions claires et un
bon relationnel ”

“ I have found all
communication and
products to be of a high
standard ”

“ Très bon avis, relation de
confiance et ce depuis
longtemps ”

“ Very satisfied ”

“ Good organised and
friendly ”

“ Professionnelle, réactive et
experte ”

“ Vous avez notre confiance ”

“ I have a good opinion
about the company ”

“ Good and efficient
cooperation ”

“ Les réponses sont rapides et claires. Je suis informée
des délais et il y a un suivi régulier des projets. Les
personnes eues au téléphone (et par mail) ont été
agréables et m'ont apporté les réponses dont j'avais
besoin. J'ai donc une image positive de votre société ”

“ The society is a world reputable
company with high standing .
We are proud to represent and
distribute Helioscreen products. ”

1. Introduction

In the cosmetic field dedicated to the sun protection, a special care is assumed against the sun light which is a continuous electromagnetic wave. In this way, it is worldwide accepted that we have to protect our skin by using sunscreen products (but also with other sun protection strategies such as clothes, etc.) from the UV radiation which is the most harmful and especially with UVB (290 to 320 nm) and UVA bands (320 to 400 nm).

Concerning a part of the UV range, a part of the UV radiation called UVC doesn't reach the earth's surface (absorbed by the ozone, molecular oxygen and water vapor in the upper atmosphere layer). From this UVC range (from 100 to 290 nm), the spectral band can be separated in 3 sub-bands (differences in literature) with:

- UV-C from about 290 to 230 nm,
- V-UV from about 200 to 140 (for Vacuum Ultra-Violet),
- X-UV from about 140 to 100 (near X radiation).

In fact, due to human-made chemicals released into the atmosphere, as the ozone layer gets thinner, the protective filter activity of the atmosphere against UV radiation is progressively reduced and a full recovery of the ozone level is not expected until 2050.

Moreover, artificial sources of UV radiation include several types of UV lamps (arc welding tools, mercury vapor lamps, etc.) and are widely used in industrial processes to disinfect, dry inks and resins, administer phototherapy, germicidal lamps (main artificial sources), etc. The industry uses artificial UV rays of different wavelengths and intensities, often at levels higher than solar radiation and with more harmful wavelengths (UVC), which makes artificial UV radiation inherently much more dangerous for your health.

Therefore, to have a complete UV protection for some specific activities and due to the separation of the sub-band with V-UV which can have a propagation only in vacuum, this study only focused on the UV-C protection from 290 to 200 nm.

2. Method

In this study, as few sunscreen products are developed to be protective in the UV-C range, only 4 sunscreen products (named P1, P2, P3 and P4) were tested to show the potential UV-C protection.

For this purpose, the sunscreen products were applied at 1.3 mg/cm² on 3 replicates of Molded PMMA plates HD6 and spread by using an automatic robot HD-SPREADMASTER. After a drying step of 15 min in dark (temperature was controlled at 25°C by using a dedicated appliance HD-THERMASTER), UV transmittance from 200 to 290 nm was measured by using a spectrophotometer JASCO V-770.

3. Conclusion

From the Graphic 1, it is possible to observe that the products developed especially to protect consumer from all UV have a UV-C absorption too.

Following these results, it appears that this method is simple to use to assess the products with UV-C protection.

In conclusion, in addition to the physical UV protection, specific workers should wear skin protection for body parts that cannot be covered, mainly the face, ears, neck and neck, by applying a large amount of sunscreen with UV-B, UV-A and UV-C to the skin left bare.

Graphic 1. UV-C absorbance for products P1, P2, P3 and P4

