



Dermatest

Newsletter

June 2016



HALF THE YEAR GONE ALREADY!

'This Issue'

- TGA to Audit Sunscreens .. p1
- Climate Change Impacts for Sunscreens p2
- Reef Friendly Sunscreens.....p 3
- ISO Linked Special Conference p 4

Standard RIPT Dates for the Remainder of 2016

Start Date	End Date
August 3rd	–September 9th
September 26th	–November 2nd
November 14th	–December 21st

*Samples now need to be with us **TWO WEEKS** before, due to hold-ups in US Customs and high test demand.*

SEE ANNOUNCEMENT p4 Special Conference Dec 2016

For our latest price list [June 2015] contact us at...
info@dermatest.com.au.

TGA Notifies Random Reviews

The Listing Compliance Section of the Complementary and OTC Medicines Branch of TGA advised, on June 2nd, that random checks of Sunscreens are being conducted. TGA will request that Sponsors of Sunscreens provide...

1. The label
2. Finished Product Specification
3. Certificate of Analysis for the latest released batch
4. Full documentation of the formulation.
5. Supporting evidence for all indications/claims.

ISO in Paris

As we go to publication, the next series of meeting of ISO TC 217 - Cosmetic Standards - is scheduled to be held in Paris, France. Our hosts will be AFNOR - the French Standards Organisation. Working Groups who will meet at this series during the period of 21st to 27th June, include GMP, Analytical and Sunscreen.

Vitamin D

In April, a joint position statement was issued by Australian and New Zealand Bone and Mineral Society, the Australasian College of Dermatologists, Cancer Council Australia, Endocrine Society of Australia and Osteoporosis Australia. The link is ...
http://wiki.cancer.org.au/policy/Position_statement_-_Risks_and_benefits_of_sun_exposure

Coming Conferences

Sun Protection & Anti-Ageing Skin Care Conference Asia

- Hilton Singapore 6th and 7th July 2016

<http://www.summit-events.com/index.php?&id=39>

IFSCC Congress Orlando Florida

Oct 30th to Nov 2nd 2016

<https://ifsc2016.com>

ISO Plenary Meeting Series Sydney Australia

5th to 9th Dec 2016. see details below.

49th Annual ASCC Conference

3rd May 2017 - 5th May 2017

Venue: Sunshine Coast, Queensland

Climate Change, Ozone and All That

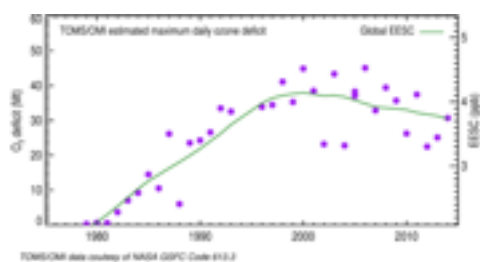
The question of the impact of changes to climate is relevant to the consideration of appropriate sun protection. Will we need to have more effective sunscreens into the future, or perhaps need to modify the mix of actives?

Ozone

Concerns over the expansion of the "Ozone Hole" first arose in the mid 1970s⁽¹⁾

Recent Southern Hemisphere data from NASA is compiled as maximum ozone hole area, column ozone minima and daily ozone deficit comparative to 1980. All of these indices indicate a turn around and trend to improvement at this point in time.⁽²⁾ See Fig. 1. However, some⁽³⁾ have cautioned that the heating of the planet may suppress this improvement.

Fig. 1 Arctic Ozone Deficit



Global Warming

Perhaps now considered as one of the major threats to civilisation. According to the CSIRO, mean temperatures within Australia are projected to rise by 0.6 to 1.5°C by 2030.^[2]

Sun seeking behaviour is probably the main concern for consumers. Studies, such as that conducted by the Cancer Council Centre for Be-

havioural Research⁽⁴⁾, have shown that consumers tend to spend more time in the sun when the weather is warmer.

UV Index

The Ultra Violet Index is the most often used tool for consumers to access in relation to information regarding ambient sunlight conditions. Not only has it been available in newspapers, television weather reports and websites where it is documented daily, but access to real time updates is now available both on Cancer Council and ARPANSA websites and even downloadable as an App.⁽⁵⁾

Fig 2. Screen Dump of Sunsmart App.



So far, there does not appear to be any evidence to suggest that global warming will have an impact on UV intensity as measured by the Index.

It is possible that additional cloud cover may occur and that this will act to suppress UV intensity, whilst at the same time warming through

the greenhouse effect. This effect will vary from region to region.⁽⁶⁾

Geographic Location

Geographic location will probably remain the largest influence on the dose of UV light received. Perhaps, more important than geographic location is a question of geographic re-location, since the ability to relocate has become much easier with modern transportation.

This issue has come to more prominence due to the current debate around Vitamin D deficiency. Those of African origin, with darker skin, which is more protected from UV light have moved to Northern Europe and other climates with lower UV light levels, whilst Europeans have migrated to high UV environments such as Australia. The end point is that the migratory Europeans have increased their skin cancer risk, while those migrating from Africa to Europe have increased their likelihood of Vitamin D deficiency.

References

1. Twenty Questions and Answers About the Ozone Layer: 2014 Update Scientific Assessment of Ozone Depletion: 2014 Montreal Protocol Scientific Assessment Panel, *Scientific Assessment of Ozone Depletion*
2. Commonwealth Scientific and Industrial Research Organisation, Bureau of Meteorology. *State of the Climate*. Clayton South, Australia; 2012
3. Makin J. *Implications of climate change for skin cancer prevention in Australia*. Health Promot J Austr 2011 Dec;22 Spec No:S39-41
4. Fifty years of changes in UV Index and implications for skin cancer in Australia. Lemus-Deschamps L1, Makin JK. *Int J Biometeorol*. 2012 Jul;56(4):727-35. doi: 10.1007/s00484-011-0474-x. Epub 2011 Aug 26.
5. <http://www.sunsmart.com.au/tools/interactive-tools/free-sunsmart-app>
6. International Satellite Cloud Climatology Project <http://isccp.giss.nasa.gov/role.html>

Are Australian Sunscreens More Reef Friendly?

Is it possible that sunscreens that comply with Australian Standards are inherently more coral reef and aquatic environment friendly?

Previously, studies in enclosed waters have indicated concerns for accumulation of ingredients of products applied prior to swimming and other water related activities⁽¹⁾. The major concern of late seems to relate to the potential for damage to corals, especially on the Great Barrier Reef⁽²⁾. Whilst this has taken a back seat this summer season due to heat induced coral bleaching, overall concern seems to have intensified in recent years. This is reflected by the increase in the number of formulations claiming to be “reef safe”⁽³⁾.

Professionals involved in the coral reef ecotourism industry have implemented best practice including not taking dive and snorkel parties to enclosed atolls, as well as recommending certain sunscreens over others.⁽⁴⁾

Products making claims of friendliness appear to vary in their list of “good and bad” actives. Whilst some products base their aquatic safety on inorganic actives, others implicate specific organic actives. Issues suggested include UV suppression and toxicity to the coral polyp and or its symbiotic algae.⁽⁵⁾

An overall issue for sunscreens is the need to utilise UV light absorption and comparative photostability, which may run counter to



biodegradability for some actives⁽⁶⁾.

In order to validate lack of toxic effect on marine organisms, a suite of tests probably needs to be successfully undertaken. Such specialty toxicity tests already exist in the aquatic effluent testing arena.

Most formulators are aware of the comparatively high cost of SPF actives and thus do not usually construct the product based on an overage allowance for high wash off. However, in the E.U. and most other countries, the label claim SPF can be based on up to 50% wash off. In effect, half of the sunscreen in each application can distribute into the aqueous environment, whilst the performance of Primary sunscreens in Australia is required to be much higher. AS/NZS 2604 requires that the claimed SPF of a water resistant product be based on post water immersion, then it is likely that, in most cases, a 2 or 4 hr water resistant sunscreen will almost NOT WASH OFF at all. So is it still necessary to conduct the extensive and comparatively expensive suite of supporting tests, or do we maybe just need to formulate to the maximum (4 hrs) water resistance and confirm lack of wash off in soft, hard and salt water conditions?

Whatever the tests, they probably need to be conducted on water sampled following full body application and human immersion.

<https://blog.uvm.edu/lspechle-floccoralreefs/timeline/>

In the opinion of the author, water resistant sunscreens formulated to pass Australian test conditions are likely to be vastly less of an issue than those with the “50% discount” approach to claim support.

1.Marianne E. Balmer , Hans-Rudolf Buser , Markus D. Müller , and Thomas Poiger Occurrence of Some Organic UV Filters in Wastewater, in Surface Waters, and in Fish from Swiss Lakes Environ. Sci. Technol., 2005, 39 (4), pp 953–962

2.<http://www.greatbarrierreef.org.au/sunscreen-kills-coral-reefs-worldwide/>

3.google images: reef friendly sunscreen

4.https://cdhc.noaa.gov/docs/Site%20Bulletin_Sunscreen_final.pdf

5.Danovaro. R et al Sunscreens Cause Coral Bleaching by Promoting Viral Infections Environmental Health Perspectives Vol 1116 number 4 April 2008

6.Rodil, R et al Photostability and Phytotoxicity of selected sunscreen agents and their degradation mixtures in water Anal Bioanal Chem (2009) 395: 1513-1524



Office

Ph 61 2 95562601 Fax 61 2 95563361

Laboratories

20- 22 King St Rockdale N.S.W.

2216 Australia

Phone 61 2 95563835

Postal

P.O. Box 1022 Rockdale N.S.W.

2216 Australia

<http://www.dermatest.com.au/>



accord Cosmetic & Personal Care

Conference 2016

Held jointly with ASCC

About the event

This year's Conference presents an exciting opportunity for the Australian cosmetic industry. Sydney will play host to the 2016 annual Plenary meeting of the International Standards Organisation (ISO) cosmetics technical committee (TC217). Standards Australia will host the week long working group meetings and Plenary from 5-9 December 2016. This Conference will take advantage of having a range of experts from the cosmetic industry in fields ranging from sun protection, microbiology, analytical methods and global trends.

The **Cosmetic & Personal Care Conference** will be held on **Monday, 5 December 2016** at the **Amora Hotel Sydney**. An exciting programme of international and national speakers is being developed.

Conference Delegate Profile

Our Cosmetic & Personal Care Conference will attract CEOs, marketing, technical executives, and regulatory professionals from Accord member companies, ASCC members and non-member cosmetic companies as well as key regulatory and policy personnel from within government and other stakeholders.

About the host

Accord Australasia

Accord is the national industry body representing the manufacturers, marketers and suppliers of cosmetic, consumer, hygiene and specialty products.

Our industry's products play an important part in everyday life and are essential for healthy living and maintaining the quality lifestyle we all expect.

With estimated annual retail product sales in the vicinity of \$10 billion, the formulated cosmetic, consumer, hygiene and specialty products industry is a significant part of a prosperous Australian economy. We directly employ over 14,000 Australians (FTE).

Accord's member companies include large global consumer and cosmetic product manufacturers and small, dynamic Australian-owned businesses. A list of members is attached.

Accord's mission as the national voice of the industry, is to provide indispensable membership services to facilitate growth and productivity for a globally competitive industry.

Our strategic goals include:

- Innovation – to promote the opportunities for technology and science to enhance the reputation of industry as an innovative solutions provider, enabling increased growth and investment.
- Regulation – to achieve minimum effective and internationally aligned regulation with no barriers to trade
- Advocacy – to operate as a highly performing, responsive, communicative and well connected team (locally and internationally) capable of efficiently delivering the industry's goals.

 **accord**
hygiene, cosmetic & specialty products industry

ASCC

The ASCC is a professional scientific organisation that promotes the advancement of the theory and practice of the science and technology of cosmetics, toiletries and perfumery. Membership is open to individuals who are working or interested in the cosmetics, toiletries and perfumery industry. The ASCC objectives include:

- To promote the advancement of the theory and practice of the science and technology of cosmetics, toiletry, perfumery and the like.
- To promote education, research and other means of advancing knowledge relating to the science and technology of cosmetics, toiletry, perfumery and the like.
- To institute and arrange lectures, seminars, symposia and demonstrations and in general to provide a forum for the discussion and dissemination of information relating to the science and technology of cosmetics, toiletry, perfumery and the like.
- To promote, establish and maintain the professional status of persons having scientific or technological duties within the cosmetics, toiletry, perfumery and like industries.
- To publicly demonstrate the contribution of cosmetics, toiletry, perfumery and the like to human welfare and well-being.
- To take over the funds and other assets and liabilities of the present unincorporated association known as the Australian Society of Cosmetic Chemists.

