

TAXING OUR PATIENCE

IT SEEMS THE U.S. government is now concerned about the rising incidences of skin cancer in the country. This was expressed not in the form of issuing a Final Regulation—delayed for over a decade—that governs the use of sunscreens in the U.S. Instead, the government imposed a tax on tanning salons! At the eleventh hour of the health care overhaul bill, the U.S. Senate removed the so-called “Botax” and imposed a 10% tax on tanning salons.

Though any action to discourage the use of tanning salons should be hailed, the mere politics of this situation does not sit well with me. For one thing, it again illustrates that if you have a powerful lobby in Congress, you can pass or amend just about any bill proposed.

The powerful American Medical Association (AMA) and the American Academy of Dermatology (AAD) lobbies managed to surgically remove the 5% tax suggested on all cosmetic procedures (such as Botox) and instead implanted a new 10% tax on the tanning salon industry. More importantly, this industry will never be able to raise the \$2.7 billion over 10 years that is envisioned

by the Congressional Joint Committee on Taxation. The tanning salon industry’s growth has flat-lined and it has been hit hard by the economic downturn, and of course, by the negative publicity that indoor-tanning is a known carcinogen.¹

The House bill, on the other hand, is likely to overturn this provision in the Senate version of the health-care overhaul bill. Rep. John Boehner (R-OH) blasted the idea of a tax on tanning beds, calling it “a blatant attack on Orange Americans.”² Rep. Boehner said the anti-tanning provision would likely create opposition from the so-called “Orange Republicans.”³ Can we solicit those Orange Republicans to join forces with “red, white and tanned” Democrats to influence the FDA to finalize the sunscreen regulations in the U.S.?

I am soliciting signatures to petition the FDA to release the Final Monograph. I have met with dermatologist Steven Wang, cosmetic chemists in our industry, and members of concerned citizens and environmental groups, most notably the Environmental Working Group (EWG), to draft such a letter to the FDA. I look forward to soliciting the support of all concerned in signing this petition and declaring our opposition to the status quo. The image of the sunscreen industry and that of the regulators has been tarnished during those years of indecision. More importantly, this chaos of non-regulation has been detrimental to all those exposed to the ravages of the sun. The statistics of skin cancer growth in the U.S. bear it out.

Returning to the recent developments with the tanning salons, the Indoor Tanning Association (ITA) has agreed to a settlement with the Federal Trade Commission (FTC) regarding health and safety claims of indoor tanning.⁴ The FTC compliant claims that in March 2008, the association launched an advertising campaign designed to portray indoor tanning as safe and beneficial. The campaign is ac-

cused of making these false claims:

- Indoor tanning is approved by the government;
- Indoor tanning is safer than tanning outdoors (since UV light received is monitored and controlled);
- A national Academy of Science study determined that “the risks of not getting enough UV light far outweigh the hypothetical risk of skin cancer;” and
- Vitamin D supplements may harm the body’s ability to fight disease.

Under its settlement with the FTC, all future ITA ads must be substantiated and not misleading and are required to clearly make several disclosures:

***NOTICE:** *Exposure to UV radiation may increase the likelihood of developing skin cancer and may cause serious eye injury.*

And for ads that claim exposure to UV radiation produces vitamin D in the body must prominently disclose:

***NOTICE:** *You do not need to become tan for your skin to make Vitamin D. Exposure to UV radiation may increase the likelihood of developing skin cancer and may cause serious eye injury.*

The U.S. FDA is planning to hold a public debate in the Spring to discuss the pros and cons of stricter regulations on the use of tanning beds, including stronger warnings on cancer risks and reclassifying them.⁵

Dermatologists Drop Support

In an unrelated development, the American Academy of Dermatology (AAD) has decided to withdraw its Seal of Recognition program for sunscreens.⁶ The AAD is no longer accepting new applications for the program, but products that were accepted into the program prior to Nov. 15, 2009 will continue to carry the seal until



Nadim Shaath
Alpha Research
& Development Ltd

Dr. Nadim Shaath is the president of Alpha Research & Development Ltd., a consulting firm in White Plains, NY specializing in sunscreen formulations and new product ideas in cosmetics, essential oils and ultraviolet filters. He has over 30 years of experience as chairman of the chemistry department at SUNY-Purchase, the technical director at Felton, the president of Nickstadt-Moeller, Inc. and the CEO of Kato Worldwide. He can be reached at alphamd@aol.com

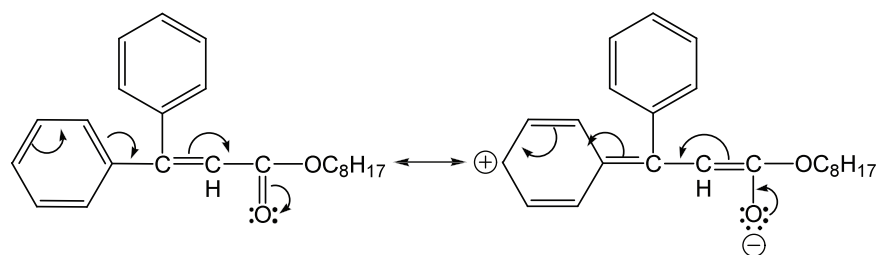


Fig. 1: Octocrylene Resonance Delocalization max: 303nm (UVB absorber)

the end of their two-year terms. Four companies currently participate in this program namely, Johnson & Johnson, AminoGenesis, Coolibar and Merz Pharmaceuticals.

As I noted in an earlier column, some members of the Academy had criticized the program due to conflicts of interest and for the fact that manufacturers were required to pay a sizable amount to display the seal on their product.

releasing methoxyl substituent. It has a UVA absorbance at about 340 nm with an extinction coefficient over 12,000. The electron-delocalization that is enhanced by the methoxyl grouping⁸ in the ethylhexylmethoxycrylene molecule decreases the molecule's energy requirements, thereby increasing its maximum absorption from 303 nm for octocrylene (see Fig. 1) to 340 nm for ethylhexylmethoxycrylene as shown in Fig. 2:

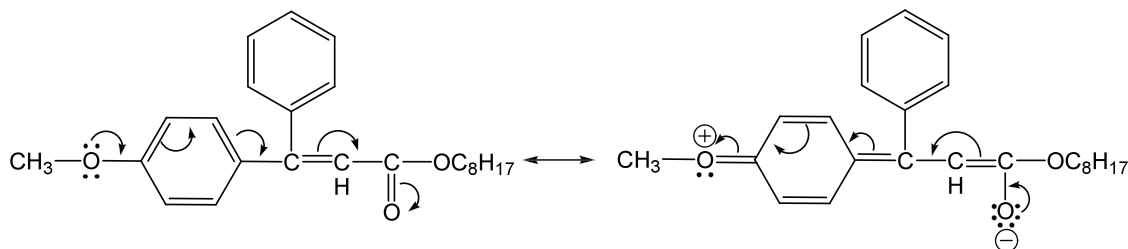


Fig. 2: Ethylhexylmethoxycrylene Resonance Delocalization max: 340nm (UVA absorber)

When politics distract us from the issues at hand, we would do well to focus back on the basics. The science of developing effective filters is still ongoing. Last year, the Society of Cosmetic Chemists had its annual meeting at the New York Hilton on Dec. 10 and 11 with a scientific session devoted solely to "sunscreens." The session was moderated by Dr. Mindy Goldstein. The first speaker was Craig Bonda from Hallstar. Bonda is an accomplished speaker. He spoke on "Improving Sunscreen Photostability by Quenching the Singlet Excited State." He has recently written an article describing the photophysics of Ethylhexylmethoxycrylene which is marketed by Hallstar as Solastay S1.⁷ The chemistry of the molecule warrants a brief discussion. It is basically an octocrylene molecule that is substituted in the para-position with an electron

The second speaker was Howard Epstein from EMD, who spoke on the encapsulation technology in sunscreens. He reviewed the Sol-gel process that permits the encapsulation of organic oil-soluble sunscreens, such as octinoxate and avobenzone. This permits adequate UVA/UVB protection with minimal dermal penetration of the organic sunscreen. Encapsulation also permits incompatible ingredients, such as avobenzone and octinoxate to be formulated together with decreased interaction between those two reactive UV filters. It also lowers the allergy potential by using an inner capsule.

The third speaker was Dr. Pascal Delrieu from Kobo products who spoke on "Non-Nano Zinc Oxide." Since zinc oxide has a lower refractive index than titanium dioxide, he focused his work primarily on

zinc oxide that has a better chance of transparency. The size of the particles has been at issue; the safety of nano-particles (below 100nm) has recently been challenged by consumer and environmental groups thus the need for larger than nano-sized zinc oxide particles. Delrieu discussed the most popular measurement methods and their capacity to predict particle size adequately. These include electron microscopy and image analysis, dynamic light scattering, laser diffraction and acoustic attenuation spectroscopy. A number of UV attenuation grades of zinc oxide of large particle size were evaluated and a special grade in the range of 100–400nm was introduced using C12-15 alkylbenzoates and jojoba esters.

All in all, the NYSCC meeting provided a needed forum for interaction and dialogue amongst scientists, regulators, mar-

keters, recruiters, job seekers and management. What goes on behind the scenes is just as important as the technical meetings and the attendance at the technology showcase. ●

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