

Abstracts

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More Than Sensitive – How to Formulate Products for Atopic and Hypersensitive Pets

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The group of cosmetics for dogs and cats is one of exceptionally strongly developing areas of the household market. Consumers' interest in specialized products for accompanying animals is rising continuously. Unfortunately this area of the market (also in case of veterinary or para-veterinary product range, sold at clinics) is still unsaturated in cosmetics tailored for pets with sensitive and hypersensitive skin. The epidermal barrier of both dogs and cats differs from the epidermal barrier of a man. A lower thickness of horny layer is a basic difference and consequently its greater permeability toward topically applied irritants and sensitizers. Additionally differences in amount and composition of s.c. lipids and the different pH of the skin surface cause cosmetic formulations for animals must be worked out according to the different strategy than cosmetics for people. At present a quite large group of pets demonstrate symptoms of the skin hypersensitivity, manifesting above all as the pruritic dermatitis. This hypersensitivity is often connected to atopy, but appears also in cases of different allergic conditions (i.e. flea allergy). Additionally some of veterinary drugs and treatments applied in such cases can increase the risk of the development of mycodermatoses and various bacterial skin diseases. It causes that skin and coat care products for this peculiar group of animals have to be formulated with the very great care and with taking

into consideration: exceptional mildness of the cosmetic base, regeneration and supporting of the barrier and bacterio- and fungistatic activity based on sensitive skin compatible actives.

Certification of Natural Cosmetics in 2009; Unified COSMOS Standards and NaTrue Requirements

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It has been lately observed that a strong trend in using certified natural cosmetics appeared concurrently with continuing growth in consumption of ecological food. Many publications and the possibility to broaden the knowledge (due to easier access to the Internet) have swayed more and more consumer to apply such products. The actual trend, predominantly observed in developed countries, is based on sustainable development and healthy lifestyle. Both certifying organizations the COSMOS as well as the NaTrue have been aware that too many logos for natural and ecological cosmetics (some of them applied locally) and the lack of uniform international standards caused some confusion among consumers. Therefore, it has been necessary to introduce transparent and comprehensive certification rules. Two sets of standards described in this article are in fact very much alike. Basic rules, permitted raw materials as well as processing and formulation requirements are very similar or mostly the same.

* These abstracts appear as they were originally published. They have not been edited by the *Journal of Cosmetic Science*.

Skin Imaging in Claims Substantiation

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A cosmetic claim is a benefit that can be perceived by a consumer when using either a decorative, cosmetic, hair or skin care product. Global regulatory governance dictates that cosmetic claims need to be substantiated to support all the claims a given product is making. Objective substantiation of claims for cosmetic products is an area of continuing interest within the cosmetic industry, and claim support for cosmetic products has to be based on scientific evidence. Obviously there is a need to protect the consumer from misleading advertizing, since excessive claims lead to doubt and cynicism, and furthermore they unfairly impact on companies making justifiably substantiated product claims. In cases where optical parameters of the skin have to be assessed, sophisticated image analysis techniques are paramount. This does not mean that only computerized image analysis leads to scientifically sound results. When used correctly, the human eye is also a marvelous image analysis tool. For both approaches, evaluation by eye or by software, the degree of image standardization and the evaluation strategies decide the success of a method. In this paper strategies of image analysis with the naked eye as well as with image analysis software are discussed and exemplified. »An image says more than thousand words« reflect how extra-ordinary images are for human beings. Most people believe that images are a true sensation from that what the eye takes up from the external world and in the last decades of brain research have discovered that an image is the final result of an amazingly complex process of the brain. Truly, images do not exist in the outer world. There is only a complex stream of photons creating electrical pulses in the optic nerve, and everything else is a creation of the brain. When we try to obtain scientifically sound data from images, we immediately understand that the brain is a master of image analysis. As a consequence there are two ways to obtain scientifically sound data from images. The first approach is to use the image analysis of the brain as a scientific tool. How to obtain this is one part of what we present here. The second approach is to program image analysis software to reduce the large amount of information in images to the very small part of information needed to quantify the parameters under evaluation. For each set of images and study targets, individual specific algorithms have to be implemented, tested, and improved until automatic image analysis becomes useful. In order to obtain scientifically sound image analysis, it is crucial to have highly standardized high resolution photo-images. Ensuring a correct and stable adjustment of all measuring set up details is crucial for image quality and its ultimate usefulness. All image analysis tools will fail when image standardization is poor. The human eye can serve as a scientific tool only if the opportunity for simultaneous comparison is available. Blind and randomized presentation of, for example, a pair of highly standardized images can be regarded as a

scientifically sound tool for analytical image measurements. To obtain numerical data rankings, scoring on a scale of different points, or even rating by use of visual analog scales can be used. In all three cases, proper statistical analysis should be performed to prove claims. Delegates will also learn that standardization of the image taking process is absolutely crucial in claims development and substantiation, not only for visual analysis but also for measurements of images with image analysis software. Automated analysis without permanent visual control cannot work on images of different illuminations, magnifications, or shifts in the test area. Given the continued increase in the monitoring of claims by advertizing standards authorities, this presentation is not only highly relevant to those in product development, but also marketing and advertizing and regulatory affairs.

Scientific Information Retrieval - Sources and Methods

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Nowadays we live and work in the environment in which the flow of information and the access to them is crucial for functioning of many sectors of the market, also for the cosmetic market. In the straightest presentation the term "flow of information" is connected most often to the information about novelties, competitors' activity etc., and enables relatively fast reaction to the changing market situation. At present we should adopt the other way of understanding this term - the access to the information should enable to overtake the competitors' activity, especially full innovation in a scope of formulation of cosmetics and modern conceptions of their activity. In this work we present a review of generally accessible sources of information, which can be useful in monitoring the current state of science and technology in the field of development of innovative cosmetics as well as their safety assessment. The review contains first of all the sources, which are either free or accessible at moderate prices.

ε-Phthalimido Peroxyhexanoic Acid: A New Commercial Way Forward to the European BPD Compliance

R. Garaffa

The ongoing implementation of the Biocide Directive 98/8/EC in Europe's 27 countries is posing the basis for the complete harmonization of its relevant admitted chemicals. Restrictive and cost intensive studies have anyway limited its portfolio of active substances to a number of chemicals with selected key features and specific toxicological profile. Among them the few ones that are registered as »New Chemical« in ELINCS listing can be counted on a single hand's fingers: ε-phthalimido peroxyhexanoic acid (known as PAP) is an example thereof. PAP has been registered at level II of ELINCS with the number 410.850.8 and has been registered and accepted within the BPD positive list. PAP has already been taken into account for its biocidal properties by major market players in the field through the development and the marketing of I&I laundry specialties