

## Green Chemical Solutions: showing the “green” path to the modern consumer



A new type of consumer offers new sales opportunities. But how far down the "green" road are manufacturers willing to go?

### INTRODUCTION

Being "green" was once decried, but today it is considered chic and smart to use natural products. A global trend towards a deeper shade of "green" can be observed: the modern consumer believes that responsible consumerism is a prerequisite for personal well-being and convenience. Thus, if manufacturers in the personal and home care / I&I segment want to be successful, they need to offer products which deliver excellent performance, yet also serve the "green" consciousness. Natural, renewable raw materials are one of the key factors in this area. To enable customers to make an informed decision on how "green" they want to go, Cognis Care Chemicals launched its innovative classification system Green Chemical Solutions. It categorizes the entire Care Chemicals product range into different levels of naturalness in a transparent and comprehensible way.

2007 has been a highly symbolic year for natural based chemistry, as it marks the anniversary of several significant milestones in the history of sustainability, and its rise to prominence in the public consciousness: 25 years ago, for example, the Brundtland Commission published a report called *Our Common Future*; and 10 years ago, the Kyoto Protocol to the United Nations Framework Convention on Climate Change was agreed on. Taking the issue to a new level, this year then saw an intensive debate on a study by economist Nicholas Stern for the British government, discussing

the effect of global warming; this time not on the environment, but on the world economy (*Stern Review on the Economics of Climate Change*).

### "GREEN" IS GOING MAINSTREAM

Today, pollution or climate change have prompted consumers to seek more natural and environmentally sound alternatives. Consumers' needs and expectations have changed considerably, and the "green" market is no longer a niche, but very much part of the mainstream - people no longer see the average consumer of organic products as being a "sandal-wearing hippie". While a "green" trend has been observable for some years, recently there has been a change in the consumer motivations behind it. Today, being environmentally conscious means something different to what it did during the brief environmental fads seen in previous decades. Whereas in the past, going "green" meant making sacrifices, today it is regarded as something that actually enriches people's lives, without them needing to compromise on convenience, personal well-being, or product performance.

### THE NEW "GREEN" CONSUMER

According to a study published in February 2007 by the German "Zukunftsinstitut", a new kind of consumer is emerging all across the world. It is referred to as LOHAS (Lifestyle Of Health And Sustainability), and already one third of consumers in industrialized societies belongs to it. In the US, the estimated annual value of the LOHAS market is 227 billion dollars and is set to keep rising. This new type of consumer is deeply concerned with protecting the environment, combined with wider moral concerns. Environmental factors, health factors, and social considerations are also becoming more important purchasing criteria. This mentality can also be referred to as "ecoethics", and it is having a real impact on the way companies behave.

As today's consumers are looking for natural products that offer excellent



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performance without harming the environment, they want to combine the benefits of nature and science - with products that deliver the best of both areas. The natural trend is not just about product safety and environmental concerns; consumers associate wellness with naturalness. Manufacturers and retailers can capitalize on this by adding benefits correspondingly. This means: as a result of society's changing values, the choice of raw materials for personal and home care / I&I products is becoming a key factor in the success of consumer brands.

### THE GLOBAL NATURAL MARKET

Datamonitor's survey *Wellness trends in personal care* (published in March 2006) showed that the natural personal care market is growing much faster than the personal care market as a whole. Over the next five years it is expected to grow at a rate of 12 percent a year, and this makes it a very attractive sector for manufacturers and retailers. Ethical consumerism is also affecting household products, which has even been discussed in the non-scientific daily press: in July 2007, The New York Times (in an article entitled *Products to break the chemical habit and get eco-friendly*) observed a "green" cleaning movement. Consumers are increasingly using household cleaners made from environmentally sound, non-polluting ingredients: in a 2004 study by Green Marketing Inc., 69 percent of respondents said they preferred a natural detergent to one derived from synthetic ingredients, because they are commonly considered to be safer, especially where children are concerned.

### LABELLED FOR SUCCESS

Due to "ecoethical" consumer demands, producers of personal care and home care / I&I products are facing new challenges: consumers are much more discriminating and demanding.

One way to remove their uncertainty about whether a product is truly natural or organic is for the manufacturer to earn certification from a credible independent organization: consumers are beginning to trust these certifications and therefore are much more likely to buy products that are labelled as "green", "organic", "natural", or "sustainable". So if manufacturers can obtain these seals of approval, it will help them to market their products.

Obviously, the concepts of natural and organic are not yet clearly and consistently defined, even legislation remains unclear. Furthermore, there are now more eco labels and certificates with different standards and requirements available for end products than ever before. Some manufacturers even created their own company-specific criteria and visualize this with an own label. However, the manufactures themselves need transparent and accurate product specific

information in order to provide the data they are legally obliged to and to comply with tightened or new regulations.

The underlying questions in the product development processes are: how far down the "green" road is the manufacturer willing to go? What is the appropriate compromise between naturalness and aesthetic and functional performance that today's consumers still demand? And how can the manufacturer find the right combination of ingredients to determine the desired "greenness" of the final product?

### COGNIS CARE CHEMICALS - RISING ON A NATURAL HIGH

Cognis Care Chemicals is an expert in natural chemistry, using over 70 percent natural and renewable raw materials, such as coconut, palm, palm kernel, soya or other natural oils. In addition, the company offers a large selection of natural sourced active ingredients derived from high-quality plant extracts. Cognis is also the world's largest manufacturer of the original APG surfactant, with expertise in production and applications acquired over many years. APG surfactants are obtained from renewable plant-derived raw materials, such as coconut oil and corn, and are used in both personal and home care products. They are mild to human skin, pose no health risks, are environmentally compatible, yet still offer polyfunctionality and high performance.

Furthermore, Cognis supports its customers in their "story telling": In order to successfully position brands






and products, it is crucial for manufacturers to create an emotional connection between themselves and the consumer. Today's consumers are not just buying the product, but the whole "story" - including ingredients, processes, provenance - and, above all, the emotional factor. Based on advanced scientific evaluation, Cognis helps its customers to make verifiable claims about natural ingredients.

### GCS - A NEW LEVEL OF TRANSPARENCY

With its Green Chemical

Solutions (GCS) classification concept, Cognis takes customer support for the development of natural-based products to a new level of transparency. Relying on product-specific data, GCS provides clear information about all products in the Care Chemicals range at a glance. Each ingredient has been given a rating of up to four green leaves - indicating what proportion of natural, renewable components it contains and how it is processed. These ratings can be found in the *Portfolio Easy Guide*:

- Products classified as "Cognis Naturals" are the "greenest" products, and as such receive the maximum four green leaves. They are derived from

Cognis Portfolio Easy Guide		
Category	Description	Product examples
 Cognis Naturals	From 100% natural, renewable feedstocks; physically purified by water, alcohol or energy treatment.	Coviox® T50 Aloveria® Generol® R
 Cognis Natural Modified	From 100% natural, renewable feedstocks; chemically processed using catalysts or other reaction aids.	Cetiol® OE Plantacare® 818 UP Glucopon® 600 CSUP
 Cognis Ecohybrids	From a mixture of natural, renewable, and synthetic feedstocks, combined in a chemical process. Higher level of natural C-atoms.	Lamesoft® Care Cosmedia® DC Texapon® N70
 Cognis Hybrids	From a mixture of natural, renewable, and synthetic feedstocks, combined in a chemical process. Lower level of natural C-atoms.	Plantapon® LC7 Dehypon® LS 54 Cosmedia® CTH (E)
 Cognis Synthetics	From synthetic feedstocks; chemically processed.	Ultrage® 300 Polyquart® Ampho 149 Dehyquart® E-CA



100 percent natural, renewable feedstocks, which are purified using only water, alcohol, or energy treatment processes.

- The next category is called "*Cognis Natural Modified*", which are indicated with three green leaves. They also come from 100 percent natural, renewable feedstocks and have been chemically purified using catalysts or other reaction aids.
- The next two categories are named "*Cognis Ecohybrids*" and "*Cognis Hybrids*", indicated with two or one green leaf. Products in these categories are still based on natural, renewable raw materials, but these are combined with synthetic feedstocks in chemical processes; the ratio of natural to synthetic C-atoms determines which of the two categories the product is assigned to.
- The final level, called "*Cognis Synthetics*", comprises ingredients based entirely on chemically processed synthetic feedstocks.

The *Formulation Easy Guide* tells manufacturers how "green" the whole formulation might be, considering the classification of the Cognis ingredients according to the Portfolio Easy Guide. So customers can judge the "eco status" and naturalness of each Care Chemicals ingredient in a formulation at a glance and thereby assess the "greenness" of the recipe.

One result of consumers' increasing environmental awareness is the proliferation of environmental labels and certificates available for end products, which play an increasingly important role in consumer purchasing decisions. *The Regulation Easy Guide* tells customers which regulatory and certification standards are existing so far and to which extent the various Cognis ingredients comply with selected certifications - supporting formulators to design products that meet the requirements necessary to obtain the desired environmental labels or certificates. If manufacturers in the personal care and home care / I&I segment are to be successful, they have to offer products which deliver high performance, a holistic product experience, and at the same time serve the latest "green" trend. They need transparent and reliable tools as well as product specific data, which enable them to exactly meet the new "ecoethical" consumer demands. With Green Chemical Solutions, Cognis offers a transparent and consistent system that guides customers through the jungle of various certification rules. It is an innovative step towards the "new greening" and facilitates customers' decision making process in consistency with their brand positioning. Thus, Cognis enables manufacturers to choose how "green" they want their products to be and which certificates and labels they are interested in obtaining.

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