Sparked by Innovation, Fueled by Consumption - Emerging Ingredients Trends

In-Cosmetics 2011

Day 1, March 29th

Milan, Italy
Today’s Presentation

“Fueled by Consumption”
- What is the current landscape of the personal care industry?

“Sparked by Innovation”
- What trends are occurring at the brand level?
- What innovations are occurring at the brand level?

“Emerging Ingredient Trends”
- What trends are occurring at the ingredient level?
Kline & Company is a leading management consulting and market research firm, active within chemicals and related industries.

Kline Management Consulting

Working with individual clients to resolve tough issues and help implement solutions

Kline Market Research

Generating information and insights for multiple clients through syndicated research
With over 40 years activity in this industry, our personal care domain expertise covers the whole value chain.

- Antimicrobials
- Conditioning polymers
- Emollients
- Film formers
- Hair fixative polymers
- Rheology control agents
- Skin whitening agents
- Specialty actives
- Specialty delivery systems
- Specialty and commodity
- UV absorbers

- Fragrances
- Hair care
- Makeup
- Nail care
- Oral care
- Skin care
- Toiletries

- Department stores
- Direct sales
- Drug outlets
- Food stores
- Mass merchandisers
- Pharmacies/perfumeries
- Salons
- Spas/beauty institutes
- Specialty stores
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The 2008-2009 had limited impact on the global personal care market

Global Retail Sales, 2003 - 2010

US$ Billion retail

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>240</td>
<td>250</td>
<td>260</td>
<td>270</td>
<td>280</td>
<td>290</td>
<td>300</td>
</tr>
</tbody>
</table>
Europe remains the largest region, but is losing share

Global Personal Care Market Share by Region, 2009

<table>
<thead>
<tr>
<th>Region</th>
<th>2003</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Americas</td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td>Asia</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Asia</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Low Growth: France, Germany, Italy, Japan, United States

Medium Growth: Canada, Mexico, Poland, South Korea

High Growth: Argentina, Brazil, China, India, Russia
Skin care is the largest and fastest growing product class.

Global Personal Care Market Share by Product Category, 2010

2004 – 2010 Growth (%)

- Skin care
- Oral care
- Hair care
- Makeup
- Toiletries
- Fragrances
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What trends are occurring at the brand level?

- The majority of focus in the skin care product class is directed towards maintaining a youthful appearance
  - Anti-aging and acne treatment products continue to be in vogue

  **EXAMPLE: Kinerase C^8 Peptide Intensive Treatment**

  - “Reduces the depth and appearance of wrinkles caused by repetitive facial expressions up to 34.9%”

  - Contains:
    - SNAP-8: a neuropeptide
    - Kinetin: antioxidant
    - Stabilized vitamin C
    - Green Tea Eco
    - Vitamin E
    - Beta-glucan
    - Hyaluronic acid
Manufacturers need to explore other areas for growth

- Innovation has slowed in some categories, as the industry waits for the next mega-trend:
  - Naturals
  - Home devices
  - Beauty from within
  - Men’s grooming

- Efforts are directed towards improved product formulations and product packaging to drive sales

DermaPlus’ DermaLastyl-β Concentrated Skin Rejuvenation Formula
Incorporating technology developed for “wound healing on the battlefield”
Green remains at the forefront of the industry

- Companies are moving toward being “green” and shifting focus towards being sustainable and socially responsible

- Areas of focus include:
  - Raw material sourcing
  - Packaging
  - Review of manufacturing processes
  - Social responsibility

- Leaders within sustainability include:
  
- Naturals trend is inherently linked with sustainability
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- What trends are occurring at the ingredient level?
Ingredients being used within personal care play a variety of roles within a formulation

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Product Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimicrobials</td>
<td>Parabens, Imidazolidinyl urea, Quaternium 15, Phenoxyethanol</td>
</tr>
<tr>
<td>Conditioning polymers</td>
<td>Cationic Guar, Polyquaterniums, Proteins, Silicones</td>
</tr>
<tr>
<td>Emollients</td>
<td>Emollient esters, Natural oils</td>
</tr>
<tr>
<td>Hair fixative/styling polymers</td>
<td>Amphomer Fixative Polymers, Resyn Fixative Polymers, VP/VA Copolymer, PVP Styling and Fixative Polymers</td>
</tr>
<tr>
<td>Rheology control agents</td>
<td>Hydroxypropylmethyl cellulose, Carboxymethyl cellulose, Glucose derivatives</td>
</tr>
<tr>
<td>Skin lightening/whitening actives</td>
<td>Hydroquinone, Arbutin, Kojic acid and derivatives, Licorice extract</td>
</tr>
<tr>
<td>Surfactants</td>
<td>Acyl isethionates, Ether carboxylates, Sulfosuccinates, Alkyl polyglucosides</td>
</tr>
<tr>
<td>UV absorbers</td>
<td>Octyl methoxycinnamate , Benzophenone-3, Avobenzone</td>
</tr>
</tbody>
</table>
As defined below, volume consumption is approximately 575,000 tonnes in 2009, following a challenging year due to recession.

Volume Breakdown for Personal Care Ingredients by Product Category, 2009

Key:
- Skin Whitening Agents
- UV Absorbers
- Hair Fixative Polymers
- Antimicrobials
- Rheology Control Agents
- Conditioning Polymers
- Emollients
- Surfactants
Europe remains the largest market for personal care ingredients post-recession, however is losing share as emerging markets gain momentum.
Surfactants account for 34% of sales within the USA, Europe, Japan, China, and India, followed by conditioning polymers.
China and India provide significant opportunities due to strong growth drivers

Volume Growth by Region, 2010 - 2014

- China
- India
- Europe
- USA
- Japan
Volume CAGR in China is 9.6% (2010-2014), key markets such as emollients and conditioning polymers underpins this growth
Emollients are also a key growth area in India, with a volume CAGR of 11.3%.
So, what is driving growth of emollients?

- Emollients benefit from strong market drivers including:
  
  ✓ Increasing living standards in both China and India

  ✓ Growth in product categories such as lipstick, face cream and body washes

  ✓ Consumer trends toward increased focus on overall body care products are driving sales of emollients

  ✓ Trend towards moisturizing body washes has increased the use of emollient esters, while bath oils more likely contain natural oils

*Source: Tata ‘Outlook for Personal Care Ingredients Industry: An Indian Perspective’*
So, what is driving growth of emollients?

- Emollients benefit from strong market drivers including:
  - Naturals
    - Natural products are increasingly popular
    - Eco-certification will drive demand of natural and vegetable based emollients
  - Anti-ageing
    - A growing number of performance claims for facial products including promises of “smoother-looking” skin and a “more youthful” appearance
    - Increases awareness created by skin-protection products will directly impact the demand for emollients
Classic emollients still dominate consumption in personal care, however natural oil extracts are gaining share.

### Emollient Volume Breakdown by Product Category, 2009

#### Key Emollient Product Category

<table>
<thead>
<tr>
<th>Key Emollient Product Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Oil Extracts</td>
<td>Almond oil, Castor oil, Jojoba oil, Shea butter, Squalene</td>
</tr>
<tr>
<td>Lanolin &amp; Derivatives</td>
<td>Lanolin, Lanolin alcohol</td>
</tr>
<tr>
<td>Emollient ester, classic</td>
<td>Caprylic/capric triglyceride, Isooctyl palmitate, Isopropyl myristate, Isopropyl palmitate, Myristyl myristate, Octyl palmitate</td>
</tr>
<tr>
<td>Emollient ester, complex</td>
<td>C₁₂₋₁₅ alkyl benzoate, Cetreayl octanoate</td>
</tr>
</tbody>
</table>

Key:
- Classic
- Complex
- Natural Oil Extracts
- Lanolin/derivatives
Multinationals dominate the market in China, whereas domestic players lead sales in India.
China and India are driving opportunities for growth, but what about Europe and the USA?

Volume Growth by Region, 2010 - 2014

- China
- India
- Europe
- USA
- Japan
Emollients are benefiting from development of the naturals segment not only in Asia, but in all regions.

- Includes truly natural and natural inspired

Natural * 15%
Others 85%

* - Includes truly natural and natural inspired
Naturals continue to be undeterred by economic slowdown

In 2010, sales grow 15% from 2009 to reach USD 23 billion

Consistent growth seen across regions

Market has been experiencing double-digit growth since 2005

Manufacturers’ Sales of the Natural Personal Care Market, 2005-2010

CAGR: 15%

2005 2006 2007 2008 2009 2010

0 5,000 10,000 15,000 20,000 25,000

NOTE: All data in manufacturers’ sales, unless otherwise indicated; manufacturers’ sales refers to the price received by the marketer before distributor and/or retail markups. The above figure includes sales from four key regions: the United States, Europe, Asia, and Brazil. Rest of the world sales are included.
The naturals market in Europe and the USA are catching up due to continuous growth in the supply of affordable natural products.
UNITED STATES

- The natural personal care market, after witnessing a decline in sales growth in 2009, recovers well in 2010.
- Sales growth in 2010 was a healthy 12%.
- Improving economic conditions and the reviving financial system in the U.S. has increased consumers confidence to spend more on beauty products.

EUROPE

- The market for natural personal care products in Europe grew by 12% in 2010.
- This is slightly lower than the past 5 years’ CAGR.
- Increased product supply and changing pricing strategies of marketers of natural products contribute to growth.
Other ingredient classes are also benefiting from the naturals trend, although performance is hindering uptake.
So what are specialty actives? Demand for active ingredients is high in Europe, as consumers increasingly try to combat signs of ageing.
Where are specialty actives used? For example, botanicals

**Sources**

- Wide variety of bioflavanoids, polyphenols, glucosides, lipids, and anti-oxidants from plant sources:
  - Oat extracts: avenanthamides
  - Green tea extracts
  - Soy extracts: isoflavones
  - Chamomille
  - Bisabolol
  - Grape seed extracts
  - Kinetin
  - Allantoin

**Benefits: Europe**

- Anti-Ageing, Anti-Wrinkle
  - Anti-Inflammatory

Application

- Other: Slimming, Skin whitening, Hair care, Increased microcirculation, And many which are specific to the extract molecule or molecule cocktail, etc
Delivery systems were originally developed to enhance active stabilization, but are now focused on penetration of the skin.

**Sources**

- Nanoparticles (Nanosized phospholipid-based encapsulation)
- Microcapsules
- Microsponges
- Patches
- Films

**Examples**

- Estee Lauder
- SureMEN
- Nivea
Essential to understand trends at the personal care brand level, in order to identify opportunities in ingredient supply.

- Men’s Grooming
- Skin Care
- Chemical/polymer science: Fixative polymers, delivery systems
- Drug development: Synthetic peptides, stem cells, and other actives
- Naturals
- Food: Vitamins, antioxidants, actives
- Specialty actives
- Traditional...
Today’s Presentation

Thank you for attending today’s presentation
This database includes eight product groups, and provides quantitative data including:

- Consumption of key personal care ingredients by application
- Supplier sales by ingredient type
- Average market pricing of ingredient
- Forecast consumption of ingredient within a five-year timeframe (2010 to 2014)

Region: Europe, USA, Japan, China

Each Region = USD 12,000
These reports are designed to assist suppliers and distributors of personal care ingredients, address such questions as:

- What is the size of the natural personal care ingredients market by product category?
- What is the growth projection for natural ingredients?
- What are the pricing differences for natural and synthetic ingredients?
- Who are the leading natural ingredient suppliers?
- How do the brand manufacturers define natural?
- What are the main decision-making criteria for a purchaser of natural personal care ingredients?
- What are the current unmet needs for manufacturers of natural finished products?
- What is the outlook for natural finished products?

Regions: Europe, USA
Discounts available until May 27th 2011,
Standard Price: USA & EU = $24,900
USA or EU only = $16,400
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