



Growing a sustainable business in Chemicals & Pharma



CSM Investor Event
Gorinchem, 27 April 2011
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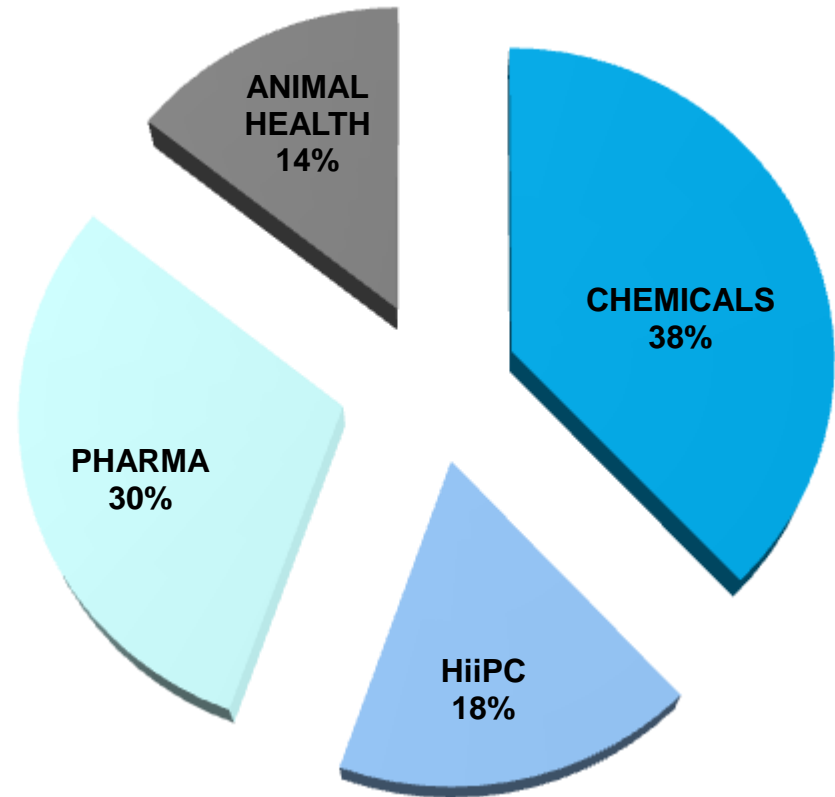
Agenda

- Chemicals & Pharma business today
- Market trends
- Chemicals & Pharma business 2011-2015
- Conclusions



C&P sales per market segment 2010

- Pharma
 - Parental dialysis
 - Injectables
- Animal Health
 - Antimicrobial
 - Acidification of feed
- Home, Industrial, Institutional and Personal care (HiiPC)
 - Anti-microbial
 - Cleaning
 - Moisturizing
- Chemical
 - Metal plating
 - Electronics
 - Solvents (incl. Agro solvents)
 - Building blocks



Results product leadership strategy 2007-2010

Segment	Purac annual growth rate 2007-2010
Pharma	5-10 %
Chemicals	5-10 %
Home Institutional, Industrial and Personal Care	5-10 %
Animal Health	5-10 %



Product Leadership Strategy

- Solid position in Lactic Acid and derivatives
- Exploit properties of products
- Understand key functions in selected market segments
- Develop products for segment needs
- Strengthen understanding of market needs
- Innovate to meet changing customer needs
- Work closely with partners in development phase and beyond



Example: Solid position with mineral salts in Pharma and Supplements

- Product-Market-Combination: Mineral salts in pharma and vitamins-minerals-supplements (VMS)
- Functions:
 - Mineral source
- Pharmaceutical grade quality standards:
 - Quality Assurance systems
 - Quality Control methods
- Strict supply chain requirements
- Growing healthcare market



Example: Strong position for solvents in Electronics

- Product-Market-Combination: PURASOLV in micro-electronics
- Functions:
 - Dissolves photo-resist material
 - Cleaning of photo-resist remains (edge bead removal)
- Market position:
 - Global market leader
 - Very strict quality requirements
- Growth opportunity:
 - Extend product line with specific qualities, opening new opportunities with technology leaders



Global trends enhance our growth and are supported by regulations



GREENHOUSE GASES

Halve the greenhouse gas impact of our products across the lifecycle by 2020.*

WATER

Halve the water associated with the consumer use of our products by 2020.* †

WASTE

Halve the waste associated with the disposal of our products by 2020.*

SUSTAINABLE SOURCING

By 2020 we will source 100% of our agricultural raw materials sustainably.

BETTER LIVELIHOODS

By 2020 we will link more than 500,000 smallholder farmers and small-scale distributors into our supply chain.



Colgate World of Care

Respect for Our Planet



USDA designates categories of bio-based products that are afforded preference by Federal agencies when making purchasing decisions

A cleaner, healthy environment is important to Colgate not only because it's the right thing to do but also because it makes good business sense. [Read more about Respect for Our Planet.](#)

40%

reduction in water use per ton of production from [2002 to 2009](#).

22%

reduction in CO2 emissions per ton of production from [2002 to 2009](#).

1998

Colgate was the first in our industry to begin using post-consumer recycled PET in Europe.

Product leadership strategy to continue growth

- Continue our Product Leadership Strategy for Lactic Acid, Lactic Acid derivatives and Lactides in selected market segments
- Create value in markets with needs for reduction of environmental impact (LCA):
 - Biobased chemicals
 - Reduced CO₂ footprint
 - Reduced Eco footprint
 - Increased bio-content
 - End of life characteristics



Strengthen competencies to develop new value propositions

Strategic investments:

- Application development:
 - Technical marketing
 - Application knowledge
 - In close cooperation with market players
- Structured innovation:
 - Scouting and screening
 - Scientific capabilities
 - Innovation discipline
 - Joint innovation with key players



Example: PURAC Sanilac our brand for natural anti-microbial claims in detergents

- Product Market Combination: Lactic Acid for Home, Industrial and Institutional (HI&I) care
- Functions:
 - Cleaning
 - Anti-microbial
- Excellent fit with USA-EPA and EU-BCD programs:
 - Safer product design
 - Green chemistry
- Market acceptance by leading HI&I companies



Example: Solid growth opportunities for PURASOLV bio-solvents

- Product Market Combination: PURASOLV for solvents in various applications
- Functions:
 - Solvency power
 - Adjuvant
 - Biodegradable
 - Eco-friendly
- Registrations in Europe and the America's
- Cooperation with leading industry players



Major opportunities for biobased building blocks

- Product Market Combinations: Lactic Acid, its derivatives and Lactides for chemicals (coatings, paints, polyesters, polyurethanes and others)
- Functions: Increase biobased content
- Purac's biobased materials are well positioned for:
 - Drop-in replacement of raw materials
 - Add new properties and improve performance of final product
 - Enable more sustainable solutions for end products



Conclusion: Excellent growth opportunities for Chemicals & Pharma business

- Purac is very well positioned to exploit today's global trend towards a biobased economy:
 - product portfolio is mainly biobased
 - fits well with global trends
- Exploit strong and established positions in Lactic Acid and its derivatives
- Growth 8-10 % per year in the period 2011-2015



