Safer Chemicals & Materials

Closing the gap with innovative approaches



Edwin C. Bisinger Jr., PhD, DABT / GC3 May, 2013



Our Business Portfolio

Decorative Paints

- Europe
- Latin America
- Asia

Performance Coatings

- Marine and Protective Coatings
- Automotive and Aerospace Coatings
- Powder Coatings
- Industrial Coatings

Specialty Chemicals

- Functional Chemicals
- Industrial Chemicals
- Surface Chemistry
- Pulp and Performance Chemicals

...covering multiple customer needs in four segments



Sustainability Strategy & Performance

AkzoNobel



2012 Dow Jones Sustainability Index Review:

AkzoNobel ranked #1 in the chemicals supersector

Bio-based products

Sustainable raw materials

Eco-premium solutions

Greenhouse gas emissions

Sustainable fresh water

management

Total Reportable Injury rate

Behavior based safety

Product Stewardship

Priority Substance Project

- 1. Global inventory
- 2. Scoring
- 3. Review
- 4. Risk assessment
- 5. Reporting
- 6. Risk Management



Substances under review



Restricted substances



Renewable raw materials in action: Products & on-going product development

AkzoNobel

<u>Dissolvine GL:</u> a biodegradable, bio-based chelating agent which replaces phosphates in automatic dishwashing (ADW) detergent



Hybrid Polymers: incorporate starch-based polymers to make biodegradable materials for cleaning and personal care applications



<u>Bio-based Latexes</u>: Drop in replacement latexes for water based paints



Development of Chemical replacements

Our company strategy

Know the customer needs

Collaboration

Development costs

Development time

Regulatory approvals



©123RF Limited

Development of new chelating agent for consumer cleaning products



©123RF Limited

Extensive collaboration with customers

Jointly developed new testing approach to confirm biodegradability in the USA

Completed field tests in several states with high success

Sharing our innovative approach in public meetings and with US EPA

Design for the Environment Program (DfE) listing

Excellent safety profile

Collaborated with US EPA to develop new test approach

Addressed carcinogenicity QSAR

A short-term kidney biomarker protocol

Shared our innovative approach in Public meetings and with EPA



©123RF Limited

Collaboration with customers and regulators is the key!

Thank you!



