

Dialogik & DEKRA Industrial

Chemicals in Products Project: Toy Sector Case Study

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CiP Project: The Toy Sector

- Status
- Sector characteristics pertinent to CiP information exchange
- Life cycle & use of chemicals
- CiP information systems
- Stakeholder uses & needs
- Enablers & obstacles

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Toy Sector Case Study Methodology & Status

	Africa	Asia	Europe	Latin America	North America	Oceania
Raw Materials	○	✓	✓	○	○	○
Manufacturers	○	✓	✓	✓	✓	○
Brands/ OEMs	○	○	✓	✓	✓	○
Traders	○	✓	✓	○	○	○
Retailers	✓	✓	✓	✓	✓	○
Consumers	✓	✓	✓	✓	○	○
NGOs/ Advocacy	○	✓	✓	✓	✓	✓
Governments	✓	✓	✓	✓	✓	○
Other Experts	○	✓	✓	✓	✓	✓

- ✓ Included
- ✓ Scheduled
- ✓ Pursuing
- Gap

Desk research **complete**; Interview consultations **in progress**; Online survey **in progress**

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The Toy Sector: Market Size 2007



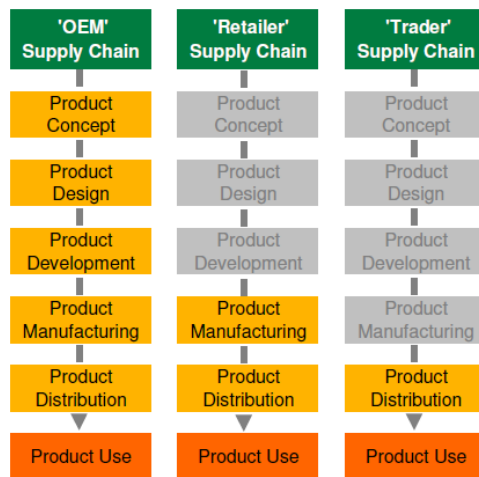
The Toy Sector

- Estimated total size: 67 billion USD
- Largest market: USA
- Largest exporter: China
 - supply 85% of toys on market in Europe
- 1000's of small & medium companies; few large firms
 - 2.700 in China in 2008
- Highly regulated
 - CiP information exchanged according to regulatory requirements of the world's largest markets
 - CiP activity beyond compliance at largest firms
- Operators
 - Material producers – (pre)Manufacturers – OEMs – Traders – Retailers – Consumers – Recyclers – Governments – NGOs



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The Toy Sector: relationships & influence



- small operators = small buying power = less control & influence
- collaborative relationships
- long-term relationships
- short-term relationships

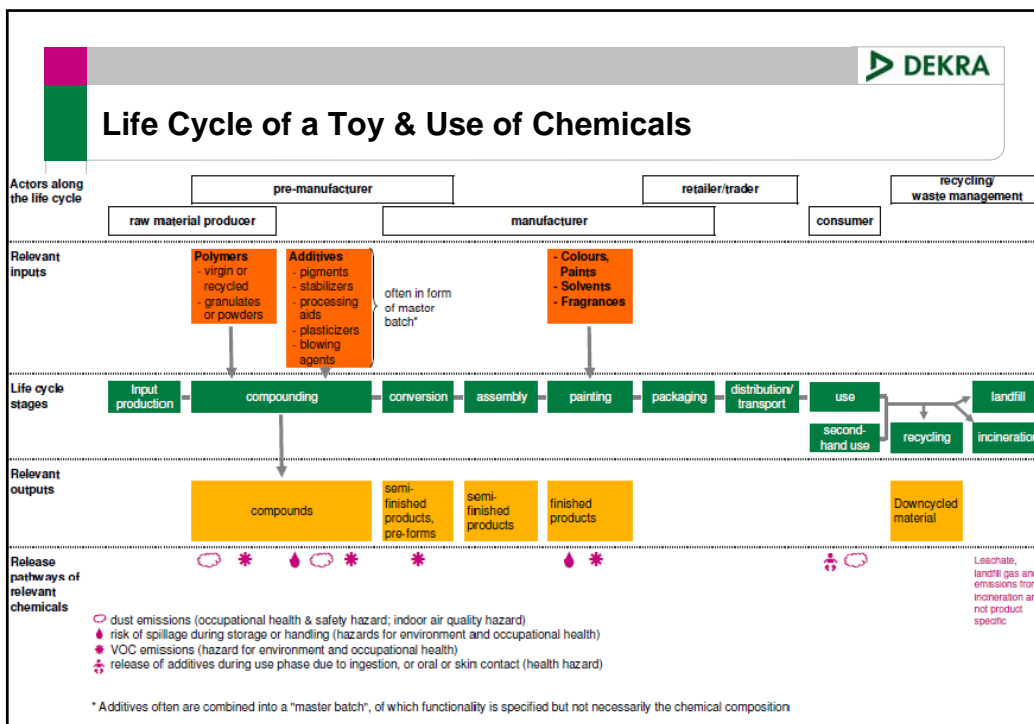
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The Toy Sector: characteristics

Market Dynamics	Market Players	Toy Characteristics	Market Structure	External Drivers
<ul style="list-style-type: none"> - Fast-moving and fashion-driven - Seasonal 	<ul style="list-style-type: none"> - Fragmented - Competitive 	<ul style="list-style-type: none"> - Inexpensive products - Heterogeneous product range 	<ul style="list-style-type: none"> - Small market (low materials consumption = low buying power) - Formal & informal (illegal) markets 	<ul style="list-style-type: none"> - Significant regulation - Sensitivity to safety - Awareness of chemicals issues in some regions

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Target chemicals	Plastic material (dyed)		Paper	Wood	Metal	Colour
Substances	Polystyrene	Thermoplastic elastomer (TPE)				
Lead (Pb)	x	x				x
Cadmium (Cd)	x	x				x
PAH (16 EPA-PAH)						
naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, dibenz[a,h]anthracene, benzo[g,h,i]perylene, and indeno[1,2,3-cd]pyrene	x	x	x	x	x	x
Phthalates (e.g. BBP, DEHP, DBP, DINP, DIDP, Dibutyltin oxide (DBTO)	x					x
Bis(tributyltin) oxide (TBTO)						x
Benzothiazole-2-thiol (MBT)	x					
Bisphenol A		x				
Isocyanate z.B. + 4,4'-methylenebisphenyl diisocyanate		x				x
p-Nonylphenol and Nonylphenolethoxylate						x
HBCCD	y					
Nickel						x
Persistent organic pollutant (POP) e.g. DDT, PCP, Lindane						x
Formaldehyde				x	x	
Phenol				x		
Chromium (VI) trioxide						x
Mercury						x
Arsenic						x
Azo dye						x
Aromatic amine e.g. Aniline						x

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CiP information systems

	Producer to Customer	Producer to Consumer	External Stakeholder to Consumer
Type	Bilateral systems	Labels (eg ISO14024)	Product guides (e.g. based on testing)
Lead	Initiated by an OEM or retailer	Individual companies in cooperation with 3rd parties (label issuer)	Consumer associations, NGOs
Purpose	<ul style="list-style-type: none"> ▪ Ensure legal compliance (toy regulations, REACH) ▪ Enable product responsibility ▪ Quality and risk management 	<ul style="list-style-type: none"> ▪ Communicate specific environmental characteristics 	<ul style="list-style-type: none"> ▪ Enable informed consumer choice ("safe" or "better") ▪ Raise awareness of consumers and producers
Toy Sector	<ul style="list-style-type: none"> ▪ Restricted Substances Lists ▪ Recipe Requests 	<ul style="list-style-type: none"> ▪ Ecolabels: Nordic Swan, Blue Angel ▪ Spiel Gut ▪ Ecologo 	<ul style="list-style-type: none"> ▪ Good Guide ▪ Healthy Stuff ▪ Stiftung Warentest ▪ Toys Advice ▪ Australian Government Product Safety Online ▪ (RAPEX)

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Information uses & needs: producers and distributors

- Compliance
 - documentation purposes
 - confirmation that materials/toys comply
- Risk assessments and quality management
 - information on the composition of materials to assess design projects, to assess materials used
 - information on risk and on feasible alternatives to offer a internal company positive lists of preferable materials
- Selection of materials
 - information on regulation and risks, as well as
 - knowledge on chemical issues to formulate specifications of materials/products to be purchased/ordered and work with raw material suppliers to develop materials suited to their needs
- Interpretation of regulation
 - Understanding; develop internal policies for chemical compliance/management, also for future changes

Information uses & needs: consumers

- Certainty to buy and use a safe product
 - confirmation that product complies with safety standards
- “Right to know”
 - ingredients list, or information on non-presence of certain chemicals of concern
- Interpretation
 - certainty in the case of scandals

Information uses & needs: NGOs

- Supporting consumers for informed choice
 - General information on risks associated to materials
 - Link between materials and substances of concern
- Advocacy for better toys
 - Transparency (assurance that toy manufacturers know what is in the toy and prevent harm)
 - Information on risks and on substances contained in toy products to lobby for regulation

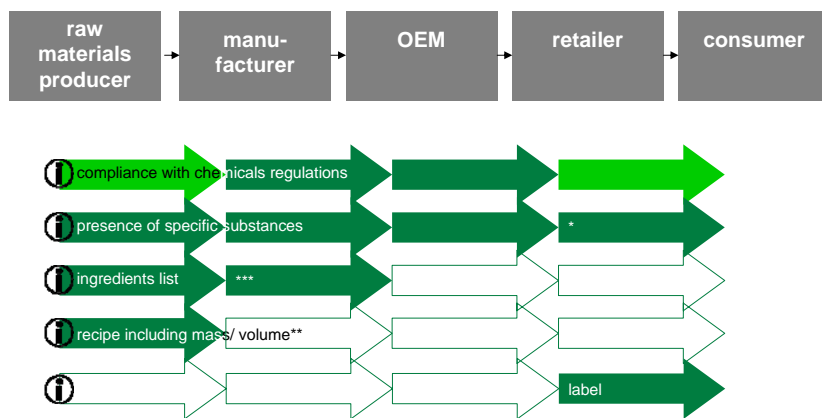
Information uses & needs: governments

- Ensure safe products
 - documented use of substances
 - information of market surveillance

- Improve regulation
 - Scientific evidence on certain risks associated with materials
 - information about substances contained in toys products at a general level

Existing CiP information flows

Overview

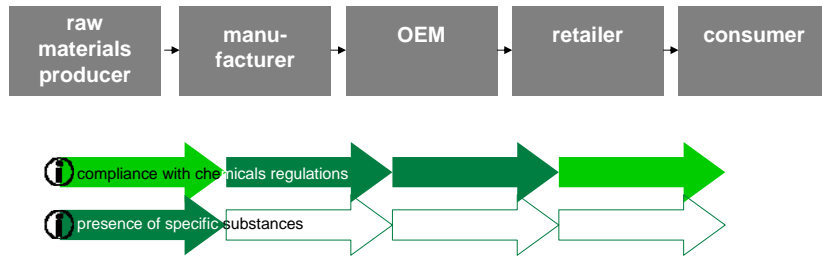


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Existing CiP information flows

- Scenario 1.

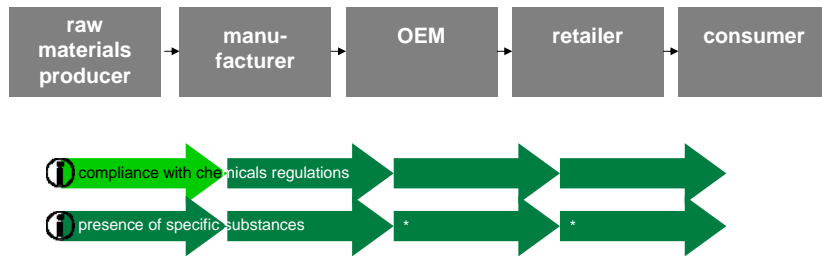
Standard approach developing countries
- without regulation or with low market surveillance



Existing CiP information flows

- Scenario 2.

Standard approach EU

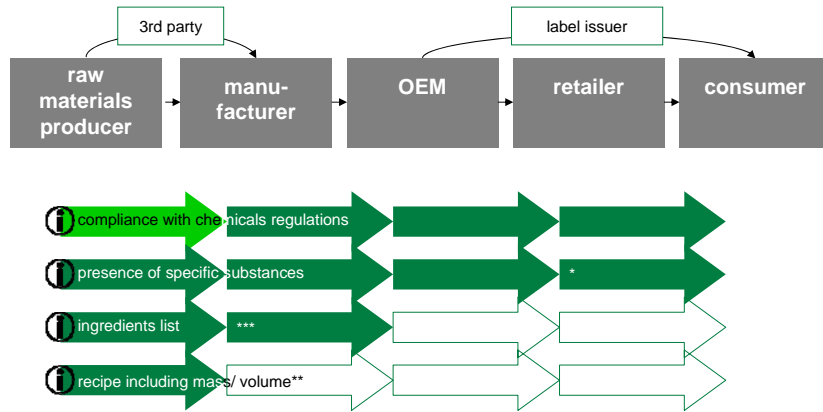


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Existing CiP information flows

Scenario 3.

Leading approach US/EU



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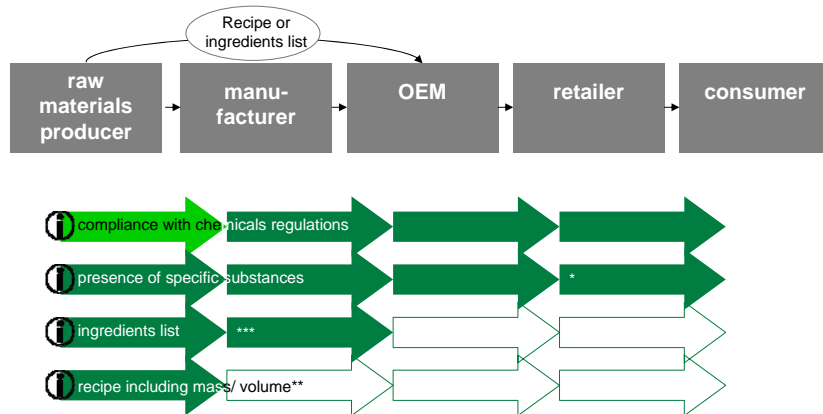
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Existing CiP information flows

Scenario 4.

Leading approach US/EU



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Gaps in information exchange

- Gaps in expertise on CiP information requests
- Gaps in demand for CiP information
- Patchy information systems
- Lack of information among enforcement authorities




Obstacles vary according to the level of information exchange

Obstacles	Low information exchange	Medium information exchange	High information exchange
Awareness industry	low	Importance of topic is known and first steps towards chemicals management	High On top of the agendas
Awareness society / NGO activities	low	Rising NGO activity, individual consumers interested	Rising number of press articles and public discussion
Market pressure	None No or low level of regulation or market surveillance	Regulation	Product differentiator Influencing consumer behaviour
Resources and knowledge	Non existent	Limited resources available for professional and proactive approach toward chemicals management No resources to process and assess CIP information	Internal risk assessments for products and materials Internal lab facilities Knowledge to specify chemicals requirements and information needs
Willingness/ reluctance to share information			In some cases granted through stable and collaborative business relations
Market power		Limited	Limited

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Discussion: overcoming obstacles

“Enablers” that help overcoming important gaps

- Overcoming limited awareness, limited market pressure
- Making communication more effective and efficient
- Pool resources, knowledge, and buying power
- Building trust

Major steps towards the future: Outlook

- Improving the information flow
- Managing complexity

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