Dialogik & DEKRA Industrial

Chemicals in Products Project: Toy Sector Case Study

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DIALOGIK DEKRA Alles im grünen Bereich.

CiP Project: The Toy Sector

- Study
- Sector characteristics, toy life cycle & relevant chemicals
- CiP information exchange
- Stakeholder uses & needs
- Gaps & obstacles
- Enablers

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Our study

Scope

- Geographical scope
  - designed to cover all regions, however the most input was received from organisations based in the EU
- Partial focus on the sub-product group “plastic toys”
  - Used for mapping the life cycle and selecting stakeholder groups for our expert survey
  - Aim: reducing the complexity of studying a fragmented sector with heterogeneous products

Survey set-up

- Series of expert interviews (approx. 30) with relevant stakeholder group
- Additional online survey

Limitations

- We assume that the majority of organisations who were willing to share their insights in our consultation were organisations with good control over toy safety
- We assessed our interviewees’ answers as reflecting rather sophisticated approaches of dealing with chemical safety

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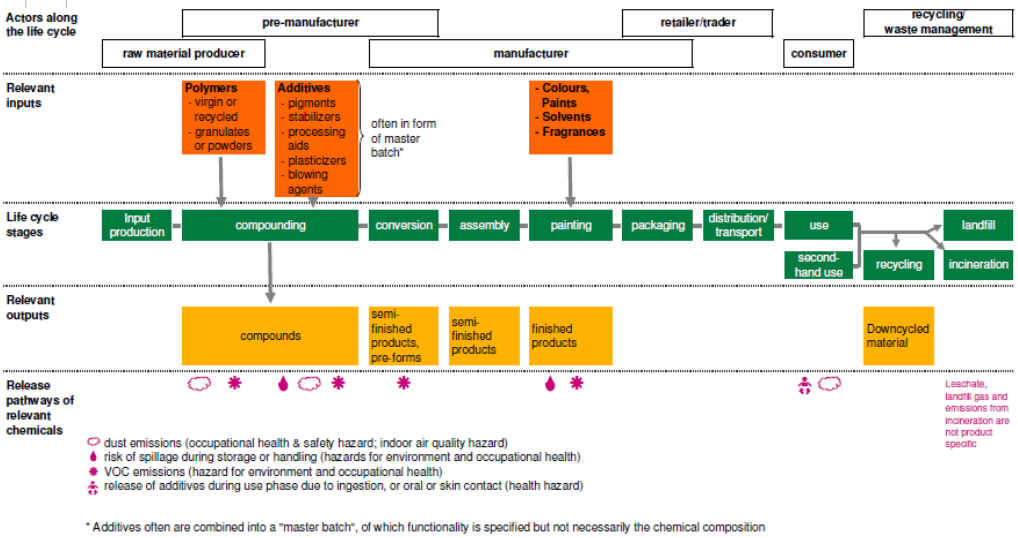
Toy sector characteristics

Market dynamics	Market players	Toy characteristics	Market structure	External pressures
- Dynamic - Fast moving - Fashion-driven - Seasonal	- Fragmented - Competitive	- Inexpensive products - Heterogeneous product range	- Small market in terms of buying power/ materials consumption - Formal markets and informal markets	- Regulation - Sensitivity - Awareness in some regions

Life cycle of a toy & use of chemicals



Relevant chemicals

- Regulated substances
  - Toy safety regulation but also other regulatory requirements (e.g. REACH in the EU)
  - Approaches and regulated substances differ between legislations
- Other relevant substances
  - Market pressure
  - Societal concern

Target chemicals	Required by/in	Comment
Antimony	EU, US, Japan, China, ISO 8124	Migration limit
Arsenic	EU, US, Japan, China, ISO 8124	Migration limit
Barium	EU, US, Japan, China, ISO 8124	Migration limit
Cadmium	EU, US, Japan, China, ISO 8124	
Chromium	EU, US, Japan, China, ISO 8124	Migration limit
Lead	EU, US, Japan, China, ISO 8124	
Mercury	EU, US, Japan, China, ISO 8124	Migration limit
Selenium	EU, US, Japan, China, ISO 8124	Migration limit
BBP (Phthalate)	EU, US, Japan	
DBP (Phthalate)	EU, US, Japan	
DEHP (Phthalate)	EU, US, Japan	
DIDP (Phthalate)	EU, US, Japan	
DINP (Phthalate)	EU, US, Japan	
DNOP (Phthalate)	EU, US, Japan	
DiBP (Phthalate)	EU	
Aluminium	EU	Migration limit
Boron	EU	Migration limit
Cobalt	EU	Migration limit
Copper	EU	Migration limit
Manganese	EU	Migration limit
Nickel	EU	Migration limit

Extract from listing of relevant substances in the CiP toys sector case study

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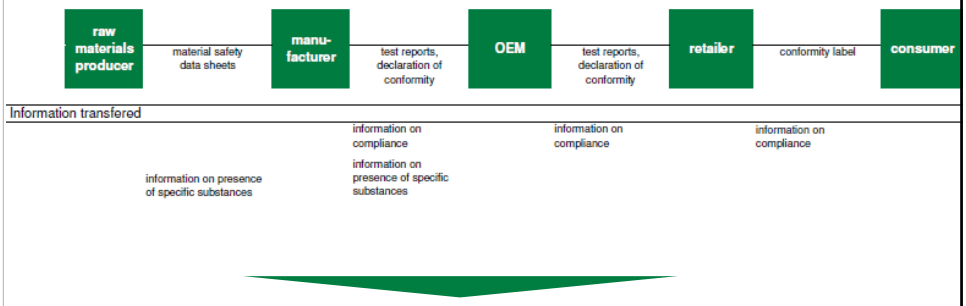
CiP information exchange in the toy sector

Manufacturer to Customer	Manufacturer to Consumer	External Stakeholder to Consumer
Type		
Bilateral information exchange	Labels (*eg* ISO14024)	Public 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		
▪Ensure legal compliance (toys related or REACH); ▪Enable product responsibility ▪Conduct quality and risk management	▪Communicate specific (environmental) product characteristics	▪Facilitate consumer choice; Raise awareness of consumers, governments, industry

We have not identified an industry-wide initiative spanning the entire supply chain

Current levels of information exchange (I)

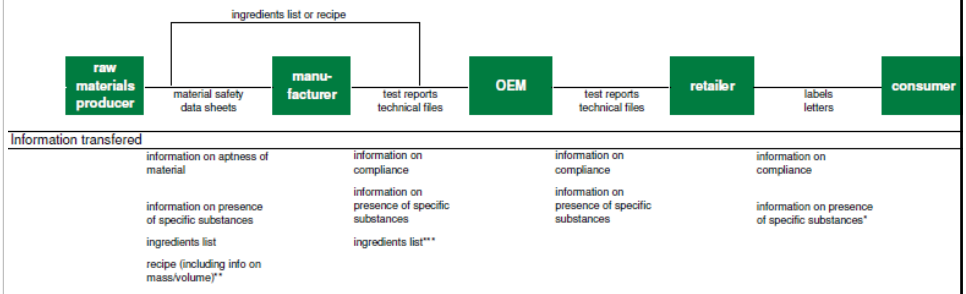
Scenario: Basic information exchange



- Key formats of transferring information: material safety data sheets and test reports
- Information often is generated rather than passed on between the actors along the supply chain

Current levels of information exchange (II)

Scenario: More developed information exchange



* upon request
** through 3rd party institute to ensure confidentiality
*** possibly with non-disclosure agreement

- Key formats of transferring information: recipe requests or ingredient lists
- "Leap-frogging": Information exchange is most often led by single companies and encompasses only some players as opposed to players at every stage

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Stakeholder needs and uses

Needs and Uses of CiP Information Along the Supply Chain	
Manufacturers and distributors - Compliance - Risk assessments and quality management - Selection of materials - Interpretation of regulation	**Consumers** - Certainty to buy and use a safe product - "Right to know" - Interpretation
Needs and Uses of CiP Information Outside of the Supply Chain	
Governments - Ensure compliant products - Improve regulation	**NGOs** - Supporting consumers for informed choice - Advocacy for better toys

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Gaps in information exchange

Gaps Along the Supply Chain	
Chemical and material producers Gap in information available from their customers on how the chemicals and materials will be used which is needed to determine exposures, assess risks and advise on effective uses	**Toy manufacturers** No gaps in information on regulated substances reported – they indicate they have the information they need to comply with requirements on chemical content - They do report it can be difficult to obtain this information - Role of testing
Gaps Outside of the Supply Chain	
Governments Gap in information available on chemicals needed - to assess conformance and - to inform good policy → Better information from companies and better public sources	**NGOs** (also representing consumers) Gap in information available on chemicals contained – intentionally, or potentially present as contaminants – in toys needed to conduct research and inform the public

Obstacles – two overarching obstacles

Ability to interpret and use information

- Authorities: hinders market surveillance
- Pre-manufacturers and manufacturers: hampers their ability to set purchasing specifications and reduces their ability to assess supplier information
- Consumers: reduces their ability to determine what they consider safe or unsafe and hinders their ability to use information from industry experts and NGOs

Complexity

- Complexity of composition of toys/materials
- Regulations differ between markets and opinion on other, non-regulated substances also differs and expands rapidly
- Achieving compliance, and working to go beyond compliance, are complex
- Obstacle to knowing exactly what information to request from whom and what information to supply or push along the value chain

Both impede the demand and supply of information

Obstacles (II)

Chemicals in toys is not at the top of the agenda

- In many markets the different actors are not actively working on the topic at the moment
- Resources to act may be low and regulations may not exist at all

Regulation

- Important driver for information exchange
- Legal frameworks define the requirements which ensure toy safety, both for economic operators and consumers, most stringent regulations are used as an orientation tool
- Regulation and the respective enforcement mechanisms shape what information is exchanged, what information is requested and the formats in which it is exchanged

Lack of resources

- Prevents investment in more extensive chemicals management schemes
- A diverse product portfolio, using a variety of materials is more costly

Obstacles (III)

Trading relations

- Long term relationships seem to enable effective information exchange
- Establishing effective information exchange takes time and coordination efforts
- In short term relationships there are less incentives and time for capacity building
- Public references or official formats were mentioned as one possible part of a solution.

Reluctance to reveal information considered sensitive to business

- Lack of knowledge (unclear, unspecific questions or nonexistent data to provide an answer)
- Suppliers do not want to share details of the substances to protect competitive advantage or to prevent themselves from higher price pressure
- Reluctance to disclose business partnerships

Market power

- Enabler and obstacle to the flow of information
- Fast and clear replies to actors purchasing high volumes or high values from a supplier

Obstacles differ depending on the current level of information exchange

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Closing remarks: 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

Thank you.