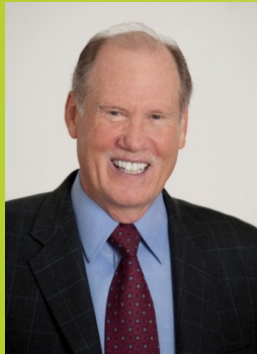


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# STAPLES®



**Green Materials II - Supply Chain Management  
Breakout Session**

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that was easy.™

# Transparency Trends

- Growing supply chain demand for more ingredient disclosure and transparency.
- Rising market awareness and expectations related to potential health risks of chemical ingredients in products.
- Expanding corporate governance policies with emphasis on chemicals in the supply chain – hazard assessments and extended producer responsibility.
- New and revised local, state, federal and international chemical related regulations requiring more transparency.
- Increasing number of product makers are responding by going beyond compliance and voluntarily listing all ingredients on their product labels and safety data sheets.

## Why are businesses asking other businesses for expanded chemical information?

- **To Inform decision making** – Product design, procurement, alternatives assessment, greener buildings, risk management, and greener supply chain.
- **To meet customer's request for more information** – A growing number of these business customers are asking their suppliers to go beyond compliance when it comes to the disclosure and elimination of chemicals of concern from their supply chain.
- **To get ahead and stay ahead of compliance and reduce costs** – More effectively evaluate the impact and more strategically manage risks and costs associated with existing and emerging global chemical restrictions, regulatory compliance, and liability.
- **To meet sustainability reporting objectives** – Compliance with a voluntary corporate program restricting certain chemicals in their products. Toxic reduction is joining carbon reduction as a key sustainability reporting metric.
- **To identify safer alternatives** – To compare and contrast with a goal to shift towards more sustainable, safer products, advancing the application of green chemistry along supply chains without sacrificing quality, performance or cost. This enables retailers and distributors to deliver a more attractive product to their customers and avoid regrettable substitutions.

**Business customers are identifying one or more of the following as value and asking suppliers to provide products and information that help them:**

Identify and transition to safer alternatives

Prevent pollution

Avoid toxins

Reduce emissions

Eliminate waste

Conserve energy

Lower total life-cycle costs

Eliminate product duplication

Green their supply chain

Measure and report success



*Each of these objectives requires more transparency and communication throughout the chain supply*

# What matters most to customers who have an awareness of the risks associated with chemicals of concern in their supply chain?

- Identity and the amount of chemicals of concern in products being offered.
- Identity of hazard traits of the chemicals in products being offered. Health hazard warnings.
- How does it impact human health in general and more specifically how does it impact sensitive or vulnerable sub-populations such as children, elderly, diabetics, asthmatics and other vulnerable sub-populations.
- Are there safer alternatives commercially available?
- Environmental impacts of the product and its chemicals throughout its life cycle.
- What happens to these chemicals when they are released into the environment?
- What are their degradation by-products? Are those degradation by-products toxic?
- Do you disclose all ingredients or chemicals of concern in your product either on your label, MSDS or website?

# Examples of growing demand for chemical information with a common objective to make an orderly transition to safer alternatives

1. Large group of hospitals require suppliers to respond as part of their procurement process to complete a **detailed questionnaire** that ask very specific questions including “does the product you are selling or offering us contain one or more chemicals listed below?”
2. One of the largest K-12 school districts in the U.S. includes the following question that **MUST BE** answered by suppliers as part of their **RFP purchasing policy**, “does the product you are offering our school district contain any chemical that is persistent, bioaccumulative or toxic (PBT) and/or is listed as a carcinogen, reproductive toxin, neurotoxin, sensitizer on any of the authoritative lists below?”
3. A large high-tech firm includes the following question that is required to be answered by all suppliers as part of their procurement policy, “does your product contain one or more chemicals listed on our **RSL** at any level?”

## What are the obstacles retailers and distributors are facing when trying to get expanded chemical information?

- **Complex supply chain** – Difficult to identify suppliers beyond Tier II and a lack of clear definition and accountability for who owns the responsibility to share chemical data. Getting chemical data can be time consuming and costly to retailers and distributors to obtain, manage and report
- **Insufficient ingredient information** – For chemical mixtures or materials, MSDSs rarely contain a complete list of chemical ingredients. This is a huge problem when a business customer requires a list of both intentionally added and unintentionally added chemicals before we can offer then a product for sale.
- **Insufficient hazard and toxicity information** – Uncertainty about whether the lack of information is because MSDS/SDS preparer did not provide complete info or if the chemicals have not been adequately tested for hazard or toxicity. Customers are not inclined to accept the premise that lack of information means safe.
- **Information may be inconsistent from one manufacturer to another** – When more than one manufacturer or exporter makes a chemical (and therefore creates an MSDS), the information provided in each of the sheets may be inconsistent.
- **MSDSs/SDSs not provided for non-chemical products** – Toys for kids, jewelry, water bottles, thermal paper receipts are examples of products that do not require material safety data sheets and where it has been reported that products in these categories may contain chemicals of concern.

Material Safety Data Sheets – Primary source of product chemical information  
**Incomplete, inaccurate and virtually unregulated**

- 100 random sampled MSDS from our companies MSDS files revealed:
  - 34% of them had no ingredient information listed.
  - 21% of them indicated the product contained a chemical that is considered to be a carcinogen by the State of California but the chemical was not identified in the ingredient section or anywhere else in the MSDS.
  - 41% of them included no information in one or more sections of the MSDS.
  - 27% of them had information that was not consistent with the label or other literature associated with the product. Ingredients listed or referenced on company label/literature and different ingredients listed on company MSDS.
  - 31% of them indicated the preparation date to be more than 2 years ago and 9% of them had preparation dates that were older than 5 years.
  - 19% of them indicated that the product was a corrosive or flammable but had no ingredient information listed.
  - 27% of them had no toxicological information
  - 48% of them had no ecological information
  - 71% of them had no disposal considerations
  - 16% of the MSDS for products that listed hazardous ingredients did not identify any primary routes of exposure.



# Retailers confront a host of risky issues related to chemicals in their supply chain

- Some product manufacturers claim chemicals of concern in their products are trade secrets or intellectual property and ask companies and their customers to trust general claims of safety about their products and the chemicals in their products.
- Many product makers want retailers to accept risks and general safety claims for products containing chemicals of concern while many of these chemicals and products are untested;
- U.S. Retailers inherit liability risk caused by trade partners' lack of transparency or non-disclosure.
- Retailers' and its customers are spending money to test products for the presence of COC when disclosure of chemicals by the product maker is a more efficient and less expensive method of transparency.

# Chemical Information Sharing

## B2B Communications

- Material Safety Data Sheets
- Labels, technical bulletins, marketing literature, corporate websites
- Regulatory response – REACH, Prop 65 and other State disclosure regulations, children’s product regulations
- Traditional bill of materials
- Voluntary full ingredient disclosure by manufacturer.
- RFP and RFI Questionnaires - Procurement
- Health Product Declarations
- Reporting against restricted or banned substance lists
- Reporting against authoritative lists

Breaking News – Conflict Minerals Reporting – SEC

Know the origins of tin, gold, tungsten, tantalum from war torn Congo and surrounding countries.

# Value of B2B Communication of Chemical Data Along Supply Chains

- Assures compliance
  - Pollution prevention/control
  - Worker safety regulations
  - Transportation regulations
  - Environmental regulations
  - Waste management
  - Chemical exposure control
- Creates value
  - Improve productivity
  - Build trust and credibility
  - Stay ahead of regulations
  - Be viewed as a trusted supplier or advisor
  - Eliminate chemical hazard



- Eliminates exposure to chemical hazards
- Prevents pollution
- Promotes wellness
- Encourages extended producer responsibility
- Attracts and retains associates with an environmental conscience