



The Ghoulish Problem of Content Collection: A Compliance Nightmare

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Restriction of Hazardous Substances (RoHS) compliance managers are thinking about content collection this Halloween. A spooky combination of general confusion, lack of standards, and looming deadlines is creating the need for information. But how do you obtain detailed information for thousands of parts from suppliers across the world?

The Bottom Line: Electronics makers selling into the European Union (EU) are unclear about how much information they need to prove that their product is compliant.

What It Means: Obtaining detailed material declarations from suppliers is important as Electronics Original Equipment Manufacturers (OEMs) prepare for product compliance regulations. On July 1 this coming year, electronic products need to be virtually void of six banned substances (see the AMR Research *Alert* article "RoHS Compliance: How Will You Replace Your BOM?"). Gathering that information, however, is a nightmare playing out at many companies.

Here's what's happening. The OEMs are forcing downstream suppliers to tell them if components are compliant with upcoming regulations. With no standard forms or technology to use, OEMs create their own forms and tell their suppliers to fill them out.

Overwhelmed suppliers are struggling to keep up with the paperwork. In a rush to keep their customers happy, they answer the questions, but too frequently with incorrect (and possibly fraudulent) answers. This is such a problem that several OEMs say they are finding mistakes and inconsistencies in about 50% of supplier's responses.

Some of the OEMs' biggest problems with collecting content are as follows:

- Difficulty finding and verifying data for thousands of parts from suppliers across the world
- Component information changes rapidly, hindering the validity of static content
- Compliance data not readily accessible to multiple groups, such as engineering, design, and procurement
- Reporting in multiple languages and formats that are acceptable to each legislating body
- No clear insight on the depth of information needed to acceptably mitigate risk

Companies in the electronics supply chain ultimately need real-time content that is integrated with a robust Product Data Management (PDM) system. Various vendors are addressing this problem; each approach has its pros and cons:

- **PLM vendors**—Companies such as **Agile, SAP, PTC, Oracle, and UGS** are already capturing component information in databases. They are primarily adding additional rows to the component record for compliance data. **Pro:** Uses existing system with minimal deployment ramifications. **Con:** Users input information rather than receive automatic content updates.
- **MES vendors**—Vendors such as **Aegis Industrial Software, Brooks Software, Camstar, Eyelit, iTAC, and Visiprise** provide functionality to handle the collection of manufacturing data at the source of manufacture, often an overlooked investment. **Pro:** Integrating MES functionality enables reporting on the "as-built" BOM as opposed to "as-designed," which is the real indicator of product compliance. **Con:** MES provides a partial component of the solution—one that is often overlooked by manufacturers.
- **RoHS niche applications**—**RoHS-WEEE.net, MDSMap, E2Open, RiverOne, and Synapsis** all offer specific niche functionality to track and report on compliance data. **Pro:** Often has robust compliance and reporting functionality. **Con:** There's a need to maintain additional software; limited ability to integrate to enterprise applications.
- **Content providers**—Electronics distributors such as **Arrow, Partminer, and Avnet**, and software vendors like **i2 Technologies**, work with the global supply base to obtain information. **Pro:** Detailed compliance information and automatic updates are available. **Con:** Have to rely on a third party to collect information that affects your risk—still only a 50% to 80% solution.
- **Professional services**—Third parties such as **Accenture, IBM, EDS, Linx-AS, Wipro, The GoodBye Chain Group**, and internal resources are often used to obtain information for some or all of the compliance information. **Pro:** Dedicated resources are working on your business problems. **Con:** These resources are time-consuming, needing a repository to store and report on information.

Conclusion: As compliance continues to horrify the OEMs legal groups, standards are becoming more important. To address this specific problem, IPC, the Association Connecting Electronics Industries, is currently fostering feedback for its material declaration standard, IPC 1752. The entire industry needs these types of standards so that the burden of compliance is kept to a minimum, and companies can focus on creating compelling competitive advantage.