Achieving Globally Compliant, Cost-Effective, and Efficient Component and Product Management with SAP EHS Regulatory Documentation

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Executive Summary

• Performing Component and Product Management in today's compliance landscape is challenging and ever increasing in complexity

• A majority of the companies benchmarked are struggling in keeping pace with their Product Safety performance

• SAP ERD offers a flexible on-demand solution to perform these tasks in a compliant, effective, and cost-effective way
Agenda

- The Product Safety Challenge
- Industry Performance
- SAP Solution Options
- Achieving higher level of performance
- Best Practices and Key Points
The Product Chemical Challenge
Control the Risks of Chemical Products and Ingredients

Adapt regional or local specifics

Address broader product marketability issues to control risks

Respond to regulatory challenges
(new / changed regulation, re-classification, document changes, tracking ...)

Understand hazards – classification of components and products

Disclose safety information

Compelling Events:
- EU CLP for Mixtures
- Exposure Scenarios
- OSHA Hazard Communication Standard
- GHS

Resource Focus
- Companies resource constrained
- Allocate resources to strategic/value add topics

Process Optimization:
- Inefficient and inconsistent global processes driving re-engineering
- SDS generation:
  - Efficient, at low cost, and high quality
  - Companies resource constrained

Major data quality issues and gaps:
- Selecting data valuable for SDS creation
- Primary Component data does not support classifications
- Component data not managed globally
Changing Global Regulations Forcing Action
Monitoring, managing, and implementing is challenging

Significant regulatory changes currently in play and expected

- OSHA HCS 2012 (GHS)
  - Revised hazard classification scheme, SDS format, hazard label formats
  - Compliance required by June 2015
- EU CLP (GHS)
  - Revised hazard classification scheme, SDS format, hazard label formats
  - Compliance required by June 2015
- Uruguay GHS
  - Compliance required by December 2017
- Canada GHS
  - Regulation expected by June 2015
- Mexico GHS
  - GHS not mandatory but accepted; Regulation expected imminently
- Argentina, Ecuador, Chile, Colombia GHS
  - Next set of South American countries expected to adopt GHS regulations

Global Product Regulations

(Enhisa, 2012)
Safety Data Sheet and Label Enforcement is up
Fines, penalties, and criminal proceedings result

- 40% compliant for SDS identification of hazards
- 44% did not have up-to-date SDS concerning safety data
- 60% compliant for labels

“In all cases of violation, enforcement action was taken. This ranged from written warnings to fines and penalty payments and, in some cases, action was taken under criminal and administrative law.”

- 67% violated provisions of REACH or CLP
- 52% of the SDS have defects
- 24% had insufficient information on labels

“If more severe offenses comprising of several deficiencies were detected, more formal measures such as orders, administrative orders, enjoinments, fines and criminal complaints were taken.”
# Without Proper Documentation and Data

Sales and Brand are at Risk

## Endangers Sales
- Cannot sell *without* compliant labels, MSDS
- Can *clog* sales process, *time-to-market*

## High Cost and Burden
- Keeping up-to-date with *changing* regulatory requirements can be *overwhelming*
- Developing/maintaining *software and content*

## Risk to Brand
- Divisions independently responsible for content breeds *inconsistency, mistakes*
- Litigation and fines from wrong/incomplete info

**Wrong labeling caused acid burns on lab worker**

**Goods Stuck at Customs**
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SAP Product Safety Benchmarking 2012
Company Demographics

What is the primary industry of your company? 
(n = 35)

- Chemicals: 75%
- Oil and Gas: 5%
- Consumer Products: 10%
- Other: 10%

What is your company’s annual global revenue? 
(n = 34)

- <$1 billion: 25%
- $1 - $5 billion: 25%
- $5 - $10 billion: 25%
- >$10 billion: 25%

Approximately how many different chemicals (non-SKU-specific products) do you globally sell? 
(n = 35)

- <1,000: 25%
- 1,000 - 5,000: 50%
- 5,000 - 10,000: 25%
- 10,000 - 25,000: 0%
- >25,000: 0%

Where do you sell your products, considering regions North America, EMEA, Asia Pacific, and Latin America? 
(n = 35)

- Mostly in one region, minor sales in other regions: 25%
- Mostly in two regions, minor sales in other regions: 25%
- Mostly in three regions, minor sales in other region: 25%
- Equally globally: 25%
On one hand…

- 20% have a formal group to monitor regulations on global basis
- 35% are current with their regulatory content updates
- 30% are current with information received from supplier SDS’s
- 24% had analyzed and were well prepared to implement OSHA GHS

But on the other…

- 31% have either no formal group or it is only loosely built into PS roles
- 27% are two or more regulatory content updates behind
- 70% are three months or more behind with handling supplier SDS’s
- 67% had either not analyzed impact or were expecting major issues with OSHA GHS implementation
On one hand…
- 15% had achieved full classification automation via expert rules
- 32% are completely consistent with warnings statements globally
- 36% author an SDS in less than two days
- 72% find SDS errors or get customer complaints rarely (<5%)
- 79% report no or very few (<1/month) sales/shipment delays due to unavailable SDS

But on the other…
- 38% were either fully or mostly manual to perform classifications
- 68% are completely regional or somewhat consistent with statements
- 30% require at least one week or more to author an SDS
- 28% find errors or receive complaints are rates >5%; 13% at 10% or more
- 21% report at least weekly sales/shipment delays due to unavailable SDS
SAP Product Safety Benchmarking Survey 2012

Broad Best in Class performance is rare

- Frequency of sales/shipment delays
- Frequency of errors/complaints
- Time to author SDS
- Currency of 3rd party regulatory content
- Global SDS consistency
- Currency of supplier SDS's
- Preparedness for OSHA GHS
- Formal organization to track regulations
- Classification and Authoring automation

Percent of companies achieving Best in Class
SAP Product Safety Benchmarking 2012

Few are operating at Best in Class broadly

No company surveyed was Best in Class in all 9 areas
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- **SAP Solution Options**
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- Best Practices and Key Points
Complementary, business process integrated solutions for creating Safety Data Sheets

**SAP ERP: Customer Processes**

**SDS Authoring OnPremise**
- SAP EHS and **EHS Regulatory Content** installed on-premise
- Operated and maintained by customer

**SDS Generation as Cloud Content Service**
- SAP **EHS Regulatory Documentation** accessed for SDSs
- Operated and maintained by SAP

**SAP EHS Regulatory Documentation Cloud Content Service**
- Safety Data Sheet Sub-Process
- Keep up-to-date with Global Regulations
- Perform Hazard & Regulatory Classifications
- Create Safety Data Sheets and Hazard Label Text Information

**SAP ERD** is an extension of a customer’s product stewardship process that automates the generation of Safety Data Sheets in a cloud content service
SAP EHS Business Process Integration

Product SDS Management
- Perform Regulatory and DG Classifications
- Generate & deliver SDS, label text information, supporting data
- Global Coverage
- Proactive Management & Updates

SAP ERD Component Management
- Research Phys-chem, Tox, and Ecotox data sources
- Assess supplier SDS's
- Regularly apply Regulatory Content
- Perform Regulatory Classifications
- Generate & deliver supporting data
- Global Coverage
- Proactive Management & Updates

SDS, Labels, Documents
Product Data Management
Component Data Management
Regulatory Data Management
Product Stewardship Programs

Meeting customer flexibility needs
SAP EHS Business Process Integration

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SAP ERD Component Management
- Research Phys-chem, Tox, and Ecotox data sources
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Product Stewardship Programs
SDS, Labels, Documents
Product Data Management
Component Data Management
Regulatory Data Management
SAP EHS Regulatory Documentation OnDemand
Cloud content services for Component and Product SDS Management

SAP delivers a flexible model to meet customer requirements

Component Management with global coverage or
Component and Product SDS Management with global coverage

To support customer’s

ongoing product safety and hazardous materials management

By using

networked solution between SAP ERD and customer’s OnPremise system or web-based portal solution
SAP EHS Regulatory Documentation OnDemand

Two connection options

- Global EHS Regulatory Content up-to-date with regulations
- Automated ERD solution for fast turn around time and quality

- Intuitive user experience for compliance requests
- Ideal for non-SAP EHS customers and those with stable product portfolios

SAP PI or Other WebService Integrator

New!

- OnDemand service with OnPremise logistics integration
- Standard Interfaces for fast connectivity
- Full data exists at all times in customer system

SAP EHS Portal

Cloud-based Business Automation

- SAP EHS Production Environment
- Workflow Engine
- Master data
  - Product Data
  - Customer Data
  - Safety Datasheets
- SAP ERC
  - Rules Engine (Logic to produce Safety Data Sheet)
  - Content Data derived from regulations
  - Phrase translations

SAP PI or Other WebService Integrator

ALE / RFC

New!
SAP ERD Portal
Planned scenarios

SAP ERD Portal

- Raw Material/Supplier/SDS
- Component [shared | private]
- Product
- Finished Goods

- Request/Upload
- Monitoring
- Result
- Delivery
- Helpdesk/Clarification

ERD User

Request
Status
Result
Collaboration

EHS Regulatory Documentation OnDemand Service
ERD Portal screen prints
Home screen
ERD Portal screen prints
Products overview and search
ERD Portal screen prints
Supplier SDS input
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SAP Product Safety Benchmarking 2012

Few are operating at Best in Class broadly.
### The Value of Top Performance
What is this worth to your company?

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value Measure</th>
<th>Bottom Performers</th>
<th>Top Performers</th>
<th>SAP ERD Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies in survey achieving</td>
<td></td>
<td>34%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Number of areas with Best in Class Performance</td>
<td></td>
<td>0 - 2</td>
<td>6 - 7</td>
<td>9</td>
</tr>
<tr>
<td>Average Time to author SDS (days)</td>
<td>Productivity</td>
<td>8</td>
<td>&lt; 2</td>
<td>&lt; 2</td>
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<tr>
<td>Average # of Regulatory Content Releases behind</td>
<td>Risk/Compliance</td>
<td>2</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Average Errors/complaints on SDS's</td>
<td>Customer Satisfaction</td>
<td>8%</td>
<td>&lt; 5%</td>
<td>Negligible</td>
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<tr>
<td>Average Sales/shipment delays due to SDS (per month)</td>
<td>Supply Chain</td>
<td>~3</td>
<td>~1</td>
<td>Negligible</td>
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<tr>
<td>Average Ratio of Products/Manpower (calculated)</td>
<td>Efficiency/Cost</td>
<td>800</td>
<td>1,200</td>
<td>1,600</td>
</tr>
</tbody>
</table>
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Best Practices
With SAP EHS Regulatory Documentation

- Have access to high quality, peer-reviewed component end-point data as basis of classifications
- Know your components are current with Regulatory Content updates
- Know your components are current with the review and handling of your supplier SDS’s
- Have a 100% automated and globally consistent system to perform your classifications and generate your SDS’s
- Achieve consistently fast SDS generation times
- Grow into new geographies with confidence
- Optimize resources and redeploy to strategic initiatives
- Protect your Brand and reduce your compliance risk
- Reduce your operating costs
Key Points

- The task to keep compliant with today’s and future regulations is daunting
- Companies are challenged and struggling to keep pace even today
- SAP EHS Regulatory Documentation (ERD) offers the ability to achieve a higher level of performance and reduce costs at same time
- Flexibility to implement SAP ERD in either a tightly integrated mode or access via a portal
- Flexibility to license SAP ERD either for Component Management only or for both Component and Product SDS Management
THANK YOU FOR PARTICIPATING.

SESSION CODE: 0509

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