

Management of extended Safety Data Sheets by a global Chemicals' Distributor

10th Meeting of the Exchange Network on Exposure Scenario

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ECHA, Helsinki, November 2016

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I. Biesterfeld Group at glance

Holding

Biesterfeld AG

Sales (2015): 1.1 bn €
Employees: 740
Hamburg

Business Divisions

Biesterfeld Plastic

Sales: 670 m €*
Employees: 260



Biesterfeld Spezialchemie

Sales: 265 m €*
Employees: 225



Biesterfeld Performance Rubber

Sales: 50 m €*
Employees: 40



Biesterfeld International

Sales: 230 m €*
Employees: 110



Service Units

Biesterfeld ChemLogS GmbH

Hamburg

BIT-SERV GmbH

Hamburg

* unconsolidated

(1) Direct accessibility to the correct SDS for all products

- ✓ Maintenance of the current supplier's SDS for each product
- ✓ Providing our company SDS based on the information available in the literature and the Manufacturer's SDS to insure a consistency in the hazard and transport information on the product in the supply chain
- ✓ Integration of purchases, sales and the substance volume tracking with the automatic shipping of compliant SDS in the supply chain
- ✓ REACH registration status and identified uses (exposure scenario)

(2) Ensuring compliance to European and country specific requirements to SDS worldwide

- ✓ Plausibility check of supplier's (extended) SDS for the accuracy of data and classification acc. to national and international legislations
- ✓ Considering the variability in the implementation of UN GHS from one region to another (EU CLP, China GHS, US GHS, Brazil GHS ...)
- ✓ Transport classification of dangerous goods could be different from one region to another
- ✓ Notification of the products to the national emergency information services in each country
- ✓ SDS provided for a given country should be used only in that country

(3) Communication in the supply chain to keep SDS up to date

- REACH-registrant (manufacturer / importer) is responsible for providing the SDS and the required exposure scenarios as an annex to the SDS.
- ❖ Distributor is responsible for distribution of the SDS with the relevant exposure scenario in the supply chain. Distributors shall pass on the current (extended) SDS to the next actor down (client) or specific information of the use of the substance up (supplier) in the supply chain.
- Downstream User (client) is responsible for the implementation of the recommended occupational conditions and risk management measures providing in the extended SDS for the safe use by handling chemicals.

(4) Management of (e)SDS at the distributor level

- ✓ Systematically shipping and post-shipping of the current SDS to client
- ✓ No deletion of previous SDS, rather previous SDS are archived as historic document in an electronic management system
- ✓ Archived versions of SDS don't necessary be directly accessible to all employees, but should be available for further compliance purposes
- ✓ Confidential Business Information should also be considered

(5) Awareness of information changes within the supply chain

- ✓ Management of exposure scenario (validation and consolidation) and evaluation of its impacts on the business
- ✓ Maintenance of the product safety data base as it should be revised according to the current (extended) SDS
- ✓ Implementation of further regulatory requirements such as notifications, registrations and authorization of chemicals
- ✓ Training requirements (Chemistry, Toxicology, Environmental Sciences, Exposure Assessment, Chemicals Logistic and Legislation)
- ✓ Thorough tracking of the development of chemicals legislation worldwide

(1) Brainstorming on the distributor's obligations and IT-solutions available in Europe

- ✓ Planning of the transition from our old IT-systems based on the German and European legislations to a more comprehensible IT-System which could help to cover the regulatory requirements in EU and worldwide
- ✓ State of the art of the IT-architecture for a global chemicals management system and an efficient maintenance process of product safety data such as the physico-chemical, toxicological, eco-toxicological, environmental data considering at the same time the different chemicals legislations affecting our product portfolio (end-products and ingredients)
- ✓ Global Regulatory Content providing legal information for the safety of people and environment by handling of chemicals from the **production, transport and storage to the use** of the products down the supply chain
- ✓ Implementation's project and data migration ended in June 2016

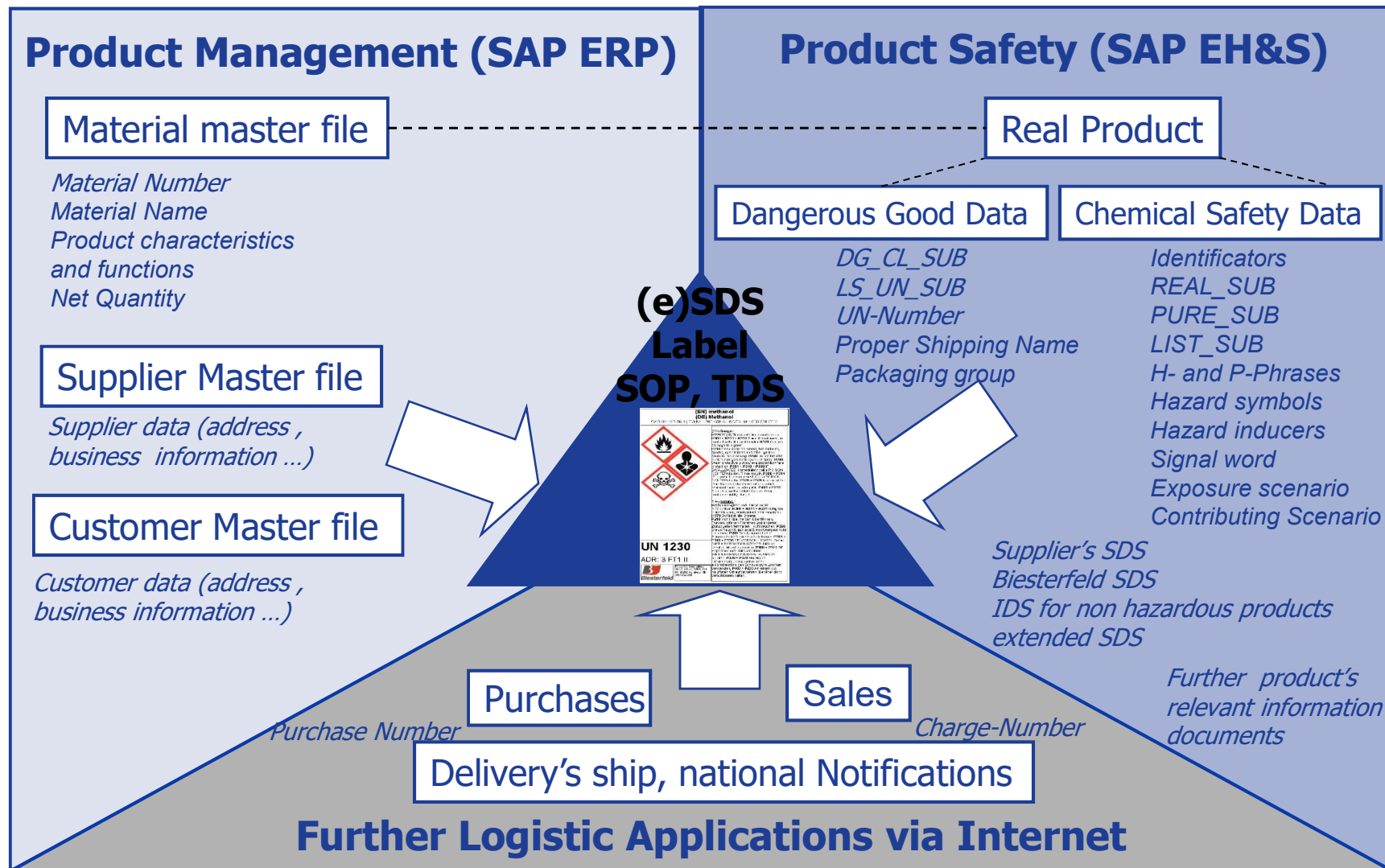
(2) Requirements for an effective implementation SAP EHS and data migration by a chemicals' distributor

- ✓ Existing SAP ERP system
- ✓ Providing all relevant existing data in a SAP-readable structured form
- ✓ Understanding of the principles of hazard and risk assessment under REACH and further legislations affecting the whole product's portfolio
- ✓ Considering the requirements of further global emerging legislations
- ✓ Use of harmonized standard phrases catalogues and SAP standard setting of the expert rules for ensuring the stability of the system by the next implementation of updates in Regulatory Content or new SAP releases
- ✓ Setting of SAP expert rules for the compliance of our business acc. to the legal requirements for chemical safety in each country or region of interest

(2) Advantages of using SAP EHS

- ✓ Expert rules for the **hazard classification, labelling and dangerous goods requirements** of products acc. to national and international legislations
- ✓ Expert rules for the **generation of the main body of SDS**
- ✓ **Standard phrases (CED and EuPhraC Libraries)** translated in more than **30 languages** for safety data sheets (SDS)
- ✓ **Standard phrases catalogue ESCom for the generation of exposure scenario**
- ✓ Time and resource saving for the processing of the SDS information
- ✓ Harmonized standard communication of exposure scenario will reduce the need to perform a DU CSR by our clients
- ✓ Automatic shipping, post-shipping and archiving of released SDS in a Record Management system
- ✓ Improving the exchange of information on the chemicals safety with chemical industry (industrial and professional users)
- ✓ Provision of the actual SDS via internet for external parties ...

Integration of product management and product safety systems



IV- Plausibility check of the extended SDS

(1) Manual check of the requirements to an extended Safety Data Sheet

- (1) Is the substance registered? (REACH-registration number)
- (2) Are there identified uses in the Section 1.2. of the main body of the SDS?
- (3) Is the substance classified as hazardous for health and environment?
- (4) Is an Annex provided with the relevant Exposure scenario?

(2) Table of content for short titles of exposure scenario with the use descriptors codes for the identified uses

(3) Manual check of the format and content of exposure scenario

1. Exposure Scenario (1)	Title of exposure scenario
2. Contributing scenario	
2.1 Contributing scenario (1) controlling environmental exposure for ...	Use descriptors codes, OC, RMM
2.2 Contributing scenario (2) controlling worker exposure for ...	Use descriptors codes, OC, RMM
2.3 Contributing scenario (3) controlling worker exposure for ...	Use descriptors codes, OC, RMM
2.n Contributing scenario (n) controlling worker exposure for ...	Use descriptors codes, OC, RMM
3. Exposure estimation and reference to its source	
Information for contributing scenario (1)	calculation methods and RCR
Information on contributing scenario (2)	calculation methods and RCR
Information on contributing scenario (3)	calculation methods and RCR
Information on contributing scenario (n)	calculation methods and RCR
4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES	
Scaling tools	

IV- Plausibility check of the extended SDS



(4) Different approaches to handle incoming extended Safety Data Sheets



- i. Is the eSDS available in the official national language of our customer with the specific national requirements such as the national OEL? → The supplier's SDS is as such pass on to our customer
- ii. Is a supplier's exposure scenario available in the official national of our customer, but some specific national requirements are missing in the main body of the SDS such as WGK or TALuft in Germany? → our own company SDS should be authored and the supplier's exposure scenario should be combined to the SDS as an annex, then providing our own extended SDS to customers


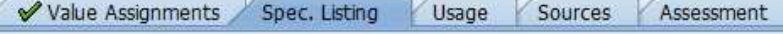

IV- Plausibility check of the extended SDS


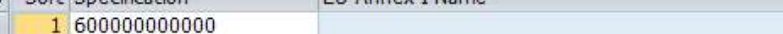
- iii. Manual maintenance of all information of the supplier's SDS in SAP EHS, then providing our own extended SDS with country specific requirements in all European languages

✓ ES_ **Edit Specification: Value Assignment**

- 
- 
- ✓ CS_

09.11.2016	Description
• 300000004311	541-02-6
- 
- 
- ✓ CS_

Real substance	300000004311	541-02-6	208-764-9
Key date	09.11.2016	Für EComXML Test	
Val. Ass.	Use and Exposure Scenario		
Sequence	132		
- 
- 
- ✓ CS_

Property Tree	
▼ 300000004311	RM Standard Property Tree
▶	Administration
▶	General
▶	✓ Composition
▶	Physical-Chemical Properties
- 
- 
- ✓ CS_

Sort	Specification	EU Annex I Name
1	600000000000	
2	620000000000	
3	630000000001	
3	630000000000	

- Number Range 61*

Are the supplier's phrases for the description of the exposure scenario correspond to the ECom Phrase?

V- Perspectives and Summary: ESComXML package

(1) Implementation of the ESComXML package

- i. Automatic exchange of the content of the exposure scenario in SAP EHS
- ii. Use of standard phrases ESCom available in all European languages

(2) Pilot exercises involving Supplier (Manufacturer and/or Formulator), Distributor and Downstream User

- i. Testing automatic import and export functions of exposure scenario from one supplier
- ii. Testing import and export of consolidated exposure scenario for the same substance or product from different suppliers

(3) Export and Import of exposure scenario from Chesar into SAP EHS

(4) Use of standard phrases in SDS and SDScomXML

- a. Distributors play a key role in the communication of the (extended) SDS in the supply chain as a connecting factor between manufacturer and downstream user**
- b. A better understanding of the safe use of chemicals between all stakeholders in the supply chain should be insured by using the same wording in (extended) SDS such as standard phrases catalogue (EuPhraC, ESCom phrases)**
- b. A consistency and efficiency of the communication of this voluminous information could be insured by using an automatic exchange format for the whole SDS in the supply chain necessary such as ESComXML and SDScomXML**

(5) Advocacy of the VCH to use ESComXML and SDScomXML

Many thanks for your attention!!!