Stoffenmanager
one decade of development and implementation

USE 2015
Albert Hollander
Content of presentation

1. Background
2. History
3. Working of Stoffenmanager
4. Platform
5. Business case
6. Conclusions and discussion
**Steps:**

1. Clean Company Strategy
2. Prioritization
3. Estimate exposure
4. Measurement of exposure

Using models in stead of measurements

Principle is also used in REACH

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**Stoffenmanager: regulation, CAD directive**

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[Diagram showing hazard, exposure, risk, and safe use]
WHY REINFORCING

- one third of the companies is handling dangerous substances
- one fourth of the employees is exposed
- 40,000 different substances are handled
- estimated 17,000 occupational diseases and 1850 deaths
- employers in SMEs take insufficient responsibility
- lack of information in the chain ‘producer, distributor, end-user’
- SDS are too technical, too long and of poor quality
- lack of knowledge and skills in SMEs
- insufficient awareness of the risks
- lack of knowledge on possible control measures
- REACH regulation
Conclusions related to Stoffenmanager:

- Demo 27\textsuperscript{th} October 2003 as part of VASt
- 10 sectors invested in sector version
- awareness: dangerous substances higher on agenda
- increase use of ‘Risk assessment tools’ 7\% → 15\%
- implementation?? Just started!!
- Stoffenmanager: hard to keep up to date, changing regulation and development of scientific knowledge
- assignment to developers in 2009 (TNO, Arbo Unie, EY/Beco): long term assurance of independency, continuity, actuality and quality of Stoffenmanager
First versions: a control banding tool.
On 28th May 2008 version 3.5 was launched
Calculation route was adjusted for dust and vapours
Calculation for daily average concentration was included
Stoffenmanager was accepted by the Labour Inspectorate
In 2009 version 4.0 was online with various adjustments to the calculation
Cross validation and refinement of Stoffenmanager as first tier assessment tool for REACH.

In 2011 CLP was included (version 4.5)
Respirable dust model and Nano module was included
Stoffenmanager available in Finnish and German language
Stoffenmanager: version 5.0

- In 2013 Stoffenmanager Premium became available (Version 5).
- Stoffenmanager registered trade mark

- In 2014 Stoffenmanager was transferred to Cosanta, a spinout of TNO and Arbo Unie (version 5.5)
- Cut-off limit 35 products free – premium
What is Stoffenmanager?

Healthy and safely working with dangerous substances is complex. Regulations, workplaces and products are continuously changing, making active and compliant chemical management a real challenge. Stoffenmanager will close the gap between complex/abstract regulation and practice. Stoffenmanager brings order and gives insight by structuring relevant knowledge and information.

The quantitative exposure model of Stoffenmanager is accepted by the Dutch Labour Inspectorate as method to evaluate exposure to chemical substances at the workplace. This part of the tool is also promoted in the European REACH R.14 Guidance.

Questions? Contact us at sales@stoffenmanager.nl
## Stoffenmanager: statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Visitors per month</th>
<th>Page views per months</th>
<th>basic users end</th>
<th>Premium users end</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3.049</td>
<td>53.086</td>
<td>15.762</td>
<td>0</td>
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<tr>
<td>2013</td>
<td>3.776</td>
<td>87.384</td>
<td>18.014</td>
<td>19</td>
</tr>
<tr>
<td>2014</td>
<td>4.960</td>
<td>131.062</td>
<td>24.446</td>
<td>48</td>
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<tr>
<td>2015</td>
<td>5.941</td>
<td>134.233</td>
<td>26.209</td>
<td>139</td>
</tr>
</tbody>
</table>

### Top 10 countries by visits percentage:

1. Netherlands: 58%
2. Germany: 22%
3. Finland: 10%
4. Belgium: 3%
5. United Kingdom: 3%
6. Sweden: 1%
7. United States: 1%
8. Italy: 1%
9. Denmark: 1%
10. France: 1%
Basic information

- Classification & Labelling
- WIC

Products

- Limit Values

Components

- CMR registration

CMR-substances
## Basic information

### Products

<table>
<thead>
<tr>
<th>Name</th>
<th>Product set</th>
<th>Supplier</th>
<th>Location/Department</th>
<th>WIC</th>
<th>H-statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterig product</td>
<td>Stoffenmanager</td>
<td>AAKO B.V.</td>
<td>Cosanta BV</td>
<td></td>
<td></td>
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<tr>
<td>Campus</td>
<td>Stoffenmanager</td>
<td>AAKO B.V.</td>
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<td>CMR R45</td>
<td>Stoffenmanager</td>
<td>AAKO B.V.</td>
<td>NL Europlant</td>
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<td>AAKO B.V.</td>
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<td>Stoffenmanager</td>
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<td>Stoffenmanager</td>
<td>AAKO B.V.</td>
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<td>Stoffenmanager</td>
<td>AAKO B.V.</td>
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<td>CMR R63</td>
<td>Stoffenmanager</td>
<td>AAKO B.V.</td>
<td>Multiple locations</td>
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<tr>
<td>Extreem stoffig</td>
<td>Stoffenmanager</td>
<td>AEGIS ENvironments</td>
<td>Cosanta BV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Risk assessment: qualitative

- Five hazard classes (A-E)
- Four exposure classes (1-4)
- Three risk classes (I-III)

<table>
<thead>
<tr>
<th>Hazard class</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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<td></td>
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<tr>
<td>3</td>
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</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Inhalation Risk Assessment: overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Product</th>
<th>Location/Department</th>
<th>hc</th>
<th>ec</th>
<th>risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>test onthouden</td>
<td>Wattyl Agricultural Primer</td>
<td>Schoonmaak</td>
<td>D</td>
<td>1</td>
<td>I</td>
</tr>
<tr>
<td>werkplek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>test onthouden</td>
<td>Wattyl Agricultural Primer</td>
<td>Schoonmaak</td>
<td>D</td>
<td>3</td>
<td>I</td>
</tr>
<tr>
<td>werkplek2</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Webinar</td>
<td>4AQUACLEAN MZI 25</td>
<td>Cosanta BV</td>
<td>C</td>
<td>3</td>
<td>I</td>
</tr>
<tr>
<td>Webinar - kopie 1</td>
<td>Isotridecanol ethoxylate</td>
<td>Cosanta BV</td>
<td>C</td>
<td>1</td>
<td>III</td>
</tr>
<tr>
<td>extremely dusty</td>
<td>object2</td>
<td>Cosanta BV</td>
<td>A</td>
<td>1</td>
<td>III</td>
</tr>
<tr>
<td>Far field (laag vluchtig)</td>
<td>_far field (laag vluchtig)</td>
<td>Cosanta BV</td>
<td>E</td>
<td>2</td>
<td>I</td>
</tr>
<tr>
<td>_far field (laag vluchtig) - kopie 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neer field en Far field (laag vluchtig)</td>
<td>_far field (laag vluchtig)</td>
<td>Cosanta BV</td>
<td>A</td>
<td>1</td>
<td>III</td>
</tr>
<tr>
<td>Neer field en far field vluchtig</td>
<td>_far field (vluchtig)</td>
<td>Cosanta BV</td>
<td>A</td>
<td>1</td>
<td>III</td>
</tr>
<tr>
<td>Neer field vluchtig</td>
<td>_far field (vluchtig)</td>
<td>Cosanta BV</td>
<td>A</td>
<td>1</td>
<td>III</td>
</tr>
</tbody>
</table>

#### Hazard class (hc)
- A low
- B average
- C high
- D very high
- E extreme

#### Exposure class (ec)
- 1 low
- 2 average
- 3 high
- 4 very high

#### Risk priority (risk)
- I high
- II average
- III low

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**Legend:**
- D: Dusty
- C: Clean
- A: Average
- E: Extreme

**Note:**
- The table above shows a risk assessment for inhalation hazards, with each entry indicating the risk priority based on hazard class (hc), exposure class (ec), and risk priority (risk). The risk priority is rated on a scale of I to III, with I being high and III being low.
Risk assessment: quantitative

- Inhalation (mg/m³)
  - Powders
  - Abrasive activities (wood, stone)
    - Wood
    - Stone (inhaled & respirable)
  - Liquids
    - Volatile
    - Low volatile
## Inhalation Risk Assessment: overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Product</th>
<th>Location/Department</th>
<th>Concentration (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>test onthouden werkplek</td>
<td>Wattyl Agricultural Primer</td>
<td>Schoonmaak</td>
<td>XYLENE 1.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT 4.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WHITE SPIRIT 4.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SOLVENT NAPHTHA PETROLEUM, LIGHT ALIPHATIC 2.32</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>XYLENE 105.62</td>
</tr>
<tr>
<td></td>
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<td>NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT 358.38</td>
</tr>
<tr>
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<td></td>
<td>WHITE SPIRIT 358.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SOLVENT NAPHTHA PETROLEUM, LIGHT ALIPHATIC 171.75</td>
</tr>
<tr>
<td>Webinar</td>
<td>4AQUACLEAN MZI 25</td>
<td>Cosanta BV</td>
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<tr>
<td>Webinar - kopie 1</td>
<td>Isotridecanol ethoxylate</td>
<td>Cosanta BV</td>
<td></td>
</tr>
</tbody>
</table>
Control & secure

**Risk assessment**
- Control measures
- Plan of action
- Reports

**Basis data**
- Work Instruction Cards (WIC)
- Register products
- Register CMR-substances
Management: Dashboard

Dashboard

Quick navigation
- Components
- Products
- Inhalation
- Skin
- Exposure assessment REACH
- Daily average concentration
- Instruction cards
- Report CMR registration

General information
- Number of components: 98
- Number of components (CMR): 16
- Number of products: 126
- Number of products (CMR): 34
- Percentage assessed products: 49.2%
- Percentage assessed CMR products: 44.1%
- # expired risk assessments (Inhalation): 6
- # expired risk assessments (Skin): 1
- # expired risk assessments (REACH): 0
- # risk assessments Inhalation: 289
- # risk assessments Inhalation with CMR products: 83
- # risk assessments skin: 8
- # risk assessments Skin with CMR products: 1
- # risk assessments REACH: 4
- # risk assessments REACH with CMR components: 2

Risk priority inhalation

Stoffenmanager
Working safely with hazardous substances

www.stoffenmanager.nl
Premium: faster, smarter, extensive

- Import of product/substance data
- Copying & templates
- Per 10 users (rights and roles)
- Location structure
- Notification & log book
- Filtering
- Version & archive
Healthy and safely working with substances is complex. Regulations, workplaces, products are continuously changing. Companies lose control and are not compliant. External help is (to) expensive and not sustainable.
**Mission**

DIY substance management

Stoffenmanager will close the gap between complex/abstract regulation and practice.
Stofboom is a tool that helps users define risks, create a safe workplace, increase critical awareness, and operate with partners in the product chain.
Stoffenmanager platform

Welcome!
Welcome: STOH@Premieconsultants.nl
Site opened on 19-07-2010
Select a menu item or choose an option from below.
- REGNR
- CREATE PRODUCTS
- RISK ASSESSMENT
- INHALATION
- RISK ASSESSMENT SKIN
- LOG OUT

What is Stoffenmanager?
Healthy and safety working with dangerous substances is complex. Regulations, workplace and products are continuously changing, making active and competent chemical management a real challenge. Stoffenmanager will show the best features to consider and update your knowledge in a short time in order to gain insight by structuring relevant knowledge and information.

The quantitative exposure model of Stoffenmanager is accepted by the Dutch labour inspectorate as method to evaluate exposure to chemical substances at the workplace. This part of the tool is also promoted in the European REACH R.34 booklet.

Questions? Contact us at
sales@stoffenmanager.nl

Doorverwijzing naar stoffenmanager.nl
Uw account hoort bij Stoffenmanager, maar u bevindt zich nu op IFA (Germany). Uw account kan niet omgezet worden naar IFA (Germany) omdat IFA (Germany) op dit moment geen automatische account omschakeling betaalt. Klik op de knop "Verder blijven werken op Stoffenmanager" om verder te werken op stoffenmanager.nl.

VERDER BLIJVEN WERKEN OP STOFFENMANAGER
Welcome to the Translation Manager

Welcome Albert Hollander. What would you like to do today?

- View or edit translations
- View or edit missing translations
- View or edit changed translations
- View or edit missing translations since my last visit
- View or edit changed translations since my last visit
- Change my personal settings and preferences

Latest changes

13-06-14 11:31 File 'EmailTemplate.resx' changed by Jan
13-06-14 10:04 File 'Item #1 in 'dbo.CmsTooltip' modified by Mario Arnone
13-08-14 08:08 File 'ProductEdit.aspx.resx' changed by Mario Arnone
13-08-14 07:58 File 'Mysettings.aspx.resx' changed by Mario Arnone
13-08-14 07:51 File 'ReportDangerousProducts.aspx.resx' changed by Mario Arnone

View archive of changes »

New languages are coming up: French, Spanish, Swedish
Further development through open innovation

- ideas
- feasibility
- development
- ICT realisation
- testing

‘lock in – lock out’ process
monthly release

idea evaluation & selection
concept evaluation
functional design
beta version
release
Every participant 1-2 steps up
It works: 75% at least 1 step up

Success factors:
- Visit coach
- Training and workshops
- Helpdesk per email or phone
- Info on website
- Open questions on community site
Conclusion 1: more than just a platform

- hosting environment (dedicated server) and SLA
- information security
- ESCROW for continuity users
- Statistics for overview use
- multi language for usability
- monthly updates for keeping pace with IT developments
- upgrading by implementation of state-of-the-art knowledge & developments for keeping attractiveness
- user-community for feedback on improvements and further development
- resources, and partners with expertise & experience
- not possible without a good business case – plan
- dedicated organisation
Conclusion 2: “high tech – high touch”

- Newsletter: 4 – 6 each year, 5,000 readers
- Users day with customers, once a year
- Website www.stoffenmanager.nl
- Social Media, LinkedIn group STM
- Annual Substances Day
- Campaigns, conferences and Symposia
- Helpdesk
Questions & discussion

Stoffenmanager: join the team