



## HazCom controls and circularity

Sanaa Chakibi, ESQ.  
Senior Chemical Management Business Advisor

06/01/2024

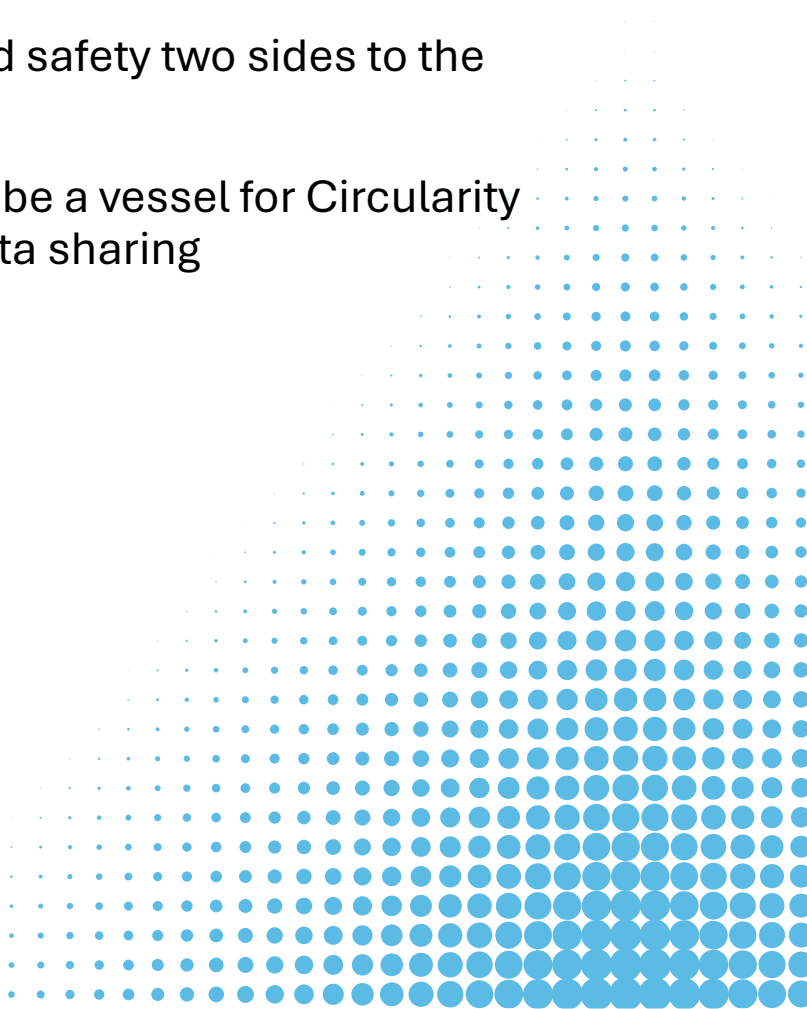


# Agenda

Defining Circularity & HazCom requirements

Circularity and safety two sides to the same coin

How DPP can be a vessel for Circularity & HazCom data sharing





# 01 Defining Circularity and HazCom

# Circularity

## Linear Economy

# Take – Make – Dispose



## Circular Economy



# Hazcom & Circularity

## ✓ Three principles of circularity in accordance with the Ellen Macarthur Foundation

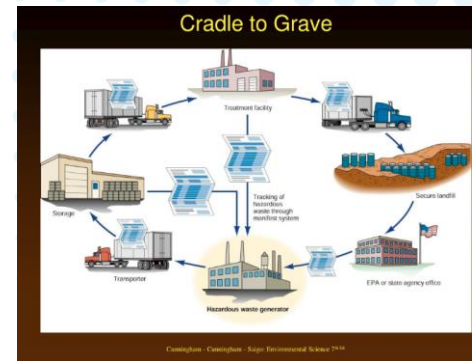
- Eliminate waste and pollution
- Circulate products and materials
- Regenerate nature

## ✓ Break Down of the circular concept

- Reduced waste
- Extended Product Lifespan
- Closed loops: materials are recycled through the system.

# Hazardous waste & Circularity concept

- Cradle to Grave is demonstrated through the hazardous Waste Management Lifecycle

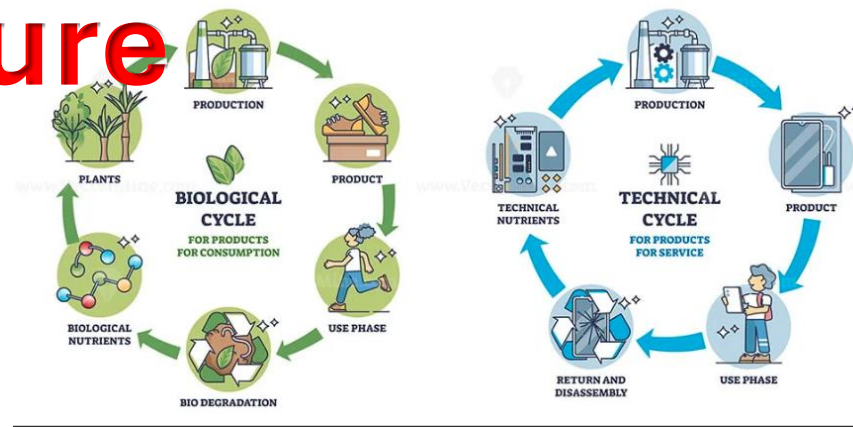


## The Hazardous Waste Management Lifecycle

**Risk of Chemical exposure**



Most wastes can be processed or treated to make them available for re-use in production, repurposed for other processes, or consumed as a source of energy





# 02 Circularity and safety two sides to the same coin

# Global Drivers for Circularity

- **EU Green Deal**– Continent growth strategy to move from a linear to a circular economy
- **Ecodesign for sustainable Products Regulation (ESPR)**–ESPR will make circular principles such as substances of concern, product durability, reusability, repairability, recycled content, carbon and environmental footprints, energy and energy efficiency and DPPs critical components of product design and life cycle in the EU.
- **EU Corporate Sustainability Due Diligence Directive (CSDDD)**– Encourages sustainable practices and pushes companies to identify and address environmental and sustainability impacts throughout their supply chain.
- **EU Corporate Sustainability Reporting Directive (CSRD)**–Directly targets a shift towards a circular economy through mandatory requirements including transparency in resource use, focus on circular economy metrics (E5), and driving innovation.



# Circularity relies on data sharing

- ✓ Circularity relies on standardized data to recording and sharing.
- ✓ PCDS Sections:

1. General Information	2. Composition Data	3. Designed for Better Use	4. Designed for Disassembly	5. Designed for Re-Use
<ul style="list-style-type: none"><li>• Product Identifiers</li><li>• Manufacturer</li><li>• Product Site</li><li>• PCDS Issue Date</li><li>• PCDS Revision Date</li></ul>	<ul style="list-style-type: none"><li>• Product Composition</li><li>• Chemical Composition</li><li>• Hazard Statements</li><li>• Chemical Threshold</li><li>• Recycled Content</li><li>• Sourcing Statements</li></ul>	<ul style="list-style-type: none"><li>• Maintenance Instructions</li><li>• Repair Instructions</li><li>• Design for Safe Use</li><li>• Positive Impacts</li></ul>	<ul style="list-style-type: none"><li>• Disassembly Instructions</li><li>• Dismantling Instructions</li><li>• Demounting Instructions</li></ul>	<ul style="list-style-type: none"><li>• CE Mark</li><li>• Refurbishment Instructions</li><li>• Remanufacturing Instructions</li></ul>

# Hazard Communication and data transparency Drivers

- SEC Climate Disclosure Rules
- California's Disclosure requirements
- OSHA's Hazard Communication Standard (HCS )
- ESG reporting



- ✓ Requirement to provide the relevant up to date SDS
- ✓ Requirement to inform and train on workplace chemical hazards
- ✓ Requirement to monitor and prevent exposure
- ✓ The right to know – Shipping documents
- ✓ Chemical movement tracking
- ✓ Chemical exposure reporting

# Regulatory trends advancing circularity concepts in the US

- Corporate responsibility types of regulations and enforcement action: German Forced Labor Code, UFLPA, and other corporate due diligence sustainability regulations.
- Circular economy and resource efficiency. More measures and laws and regulations making EPR and circularity at the forefront of safe and green product design. The green deal type of program to be adopted more widely.
- Digitalization and data analytics: Using advanced tools to tracks chemical supply, to identify problematic human rights violation sources, SDS supplier comparison, data verification, data transfer, substitution efforts, system to system submissions, AI uses in compliance (Customer using AI to qualify compliance firms) .
- Safe and Sustainable by design (SSbD): Developing new chemicals and products inherently safe with minimal environmental impact throughout their life cycle.
- More Hazardous substances reporting, restrictions and bans as the authorities continue their chemical control efforts to increase safety and protect our environment. Just like was done with PFAS, Asbestos, Microplastics, halogenated flame retardant, nanomaterials and other chemical families in order of priorities

# HazCom controls improve workplace safety

- The main Hazard Communication Standard (HazCom) principles are:
  - Classification of Hazards : Chemicals are classified according to their health and physical hazards, following standardized criteria.
  - Labeling Requirements: All containers of hazardous chemicals must be labeled with standardized labels that include key information (Product identifier, Signal words, Hazard statements, Pictograms, Precautionary statements, Supplier identification)
  - Safety Data Sheets (SDS): Employers maintain Safety Data Sheets for each hazardous chemical, which provide detailed information about the chemical
  - Employee Training and information
  - Written Hazards Communication Program
  - Accessibility of information
  - Alignment with GHS versions



# 03 How DPP can be a vessel for Circularity & HazCom data sharing?

---

# Circularity impact on HazCom

- Extended use or re-use: The hazardous materials are encountered more than one time in a product lifecycle
- HazCom might need to adapt to new hazards based on the re-use or recycle.
- Transparency and information on labels and SDS might have to be expanded to include re-use or recycle new hazards
- More supplier communication – Supplier, Manufacturer, and end-user
- Safe design will likely lead to a decrease in the number of hazardous substances that needs to be managed or communicated about.
- Chemical registration exemptions for recycled materials containing chemicals registered previously.

## Companies' Challenges resulting from these trends

- **Transparency**
- Data Management
- Reporting
- Record Keeping
- Worker safety
- Training
- Hazardous waste management
- Supply chain management
- Emergency preparedness
- Emergency response

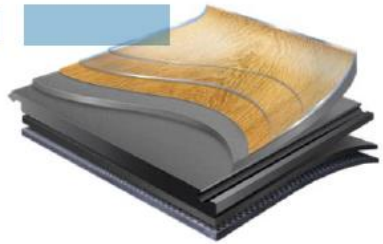


# HazCom & Circularity served with DPP

✓ Material & Product Passports

How DPP is helping companies today?

[Back](#) [Add to My Materials Library](#) [Share This Material](#)



## CN High Density Core (HDC) Click with IXPE Underlayment

Novalis Innovative Flooring



[Contact Company](#)

[View Company's Page](#)



Novalis CN High Density Core (HDC) Click is a Rigid Core Click-and-Lock Vinyl Flooring Product that has an attached IXPE underlayment. HDC is manufactured in the China and warranted for Light Commercial and Residential environments.

Category: Resilient Flooring

Last updated on 6/7/2023



### Ingredients

Threshold Level: 100 ppm  
[View Ingredients](#)

### Compliance

- [Cal Prop. 65](#) [View details](#)
- [Conflict Minerals](#) [View details](#)
- [EU REACH SVHC Candidate List](#) [View details](#)
- [EU REACH Authorisation List](#) [View details](#)
- [RoHS](#) [View details](#)
- [LBC Red List Status](#) [Unknown](#)

### Lifecycle Impacts

### Lifecycle Impacts

#### Embodied Carbon

KgCO<sub>2</sub>e: 1.37E+01

Product Unit: 1 m<sup>2</sup>

Scope(s): Product Stage (Cradle-to-Gate) A1-A3

#### Water Use

Amount of Water Used (liters): 12.0L

Product Unit: 1m<sup>2</sup>

Scope(s): Product Stage (Cradle-to-Gate) A1-A3

[Novalis\\_CN\\_HDC\\_EPD\\_ProductSpecific\\_Summary.pdf](#)

### Circularity

#### Renewable Content And Recyclable Content Data

Post-Consumer Recycled Content: 0%

Pre-Consumer Recycled Content: 0%

Recycled Content: 0%

#### Packaging

Packaging is included

##### Packaging Information:

Packaging is made out of cardboard and is 100% recyclable

Contact: NA: Graham Capobianco; EMEA: Joost Luhmann



# Questions / Thoughts

