Best practices – ChemScore 2025

Below we have compiled some of the best practices based on the results of ChemScore 2025.

Glossary of terms:

SVHC – Substance of Very High Concern

SoC – Substance of Concern

PBT – persistent, bioaccumulative and toxic

vPvB – very persistent and very bioaccumulative

PMT – persistent, mobile and toxic

vPvM – very persistent and very mobile

POP – persistent organic pollutant

Category 1: Increase transparency

1.1 Revenue from hazardous substances

This year, **Indorama Ventures** (3 out of 6 points) states that no hazardous chemicals meeting the SVHC criteria are added or present in their products, either intentionally or unintentionally.

1.2 Volume of hazardous substances

As before, **SABIC** (full 6 points) publishes all volumes for their full portfolio. Even though a distinction between SVHCs and SoCs is not made, it is possible to draw conclusions from the information provided.

1.3 Emissions from hazardous substances

This year, both **Lanxess** and **Syensqo** (4.5 out of 6 points each) report emissions of harmful substances to water, air and soil in a detailed manner. The reporting is not only in line with the Pollutant Release and Transfer Register (a common format for reporting emissions of pollutants), but also the Corporate Sustainability Reporting Directive (CSRD). CSRD is a more ambitious reporting format because it is more detailed and comprehensive.

1.4 Global hazardous portfolio

As before, **Braskem** (full 4 points) provides revenues and volumes of individual chemicals and chemical groups on a global level in its Valuation Book.

As before, **SABIC** (full 4 points) publishes its global chemicals portfolio on a substance-by-substance basis.

Category 2: Phase-out persistent chemicals

2.1 Mapping of persistent chemicals

All examples listed here scored the full 4 points:

This year, **DuPont** has mapped the presence of PFAS and not currently classified persistent chemicals as part of their screening process for identifying harmful substances (what they refer to internally as SoCs, which are not aligned with SoCs in the EU regulatory sense).

As before, **Lanxess'** Product Sustainability Monitor includes the assessment of persistent properties (PBT/vPvB/PMT/vPvM) and "looks at nine criteria, which account for production factors, substance properties, economic factors and external perspectives. The analysis goes beyond legal requirements and evaluates all LANXESS products" (see this Background Paper).

SABIC refers to its mapping the presence of persistent chemicals on page 107 in its Annual Report 2023: "COC are prioritized by SABIC using a scoring process covering five key areas: Toxic to environmental species, persistent or may accumulate in the environment." (This is not covered in the company's latest Annual Report.)

This year, **Syensqo** assessed globally marketed products and raw materials from 2024, covering over 98.5% by weight. SVHC or SoC present above 0.1% in product compositions were included in the company's calculations.

Yara states that it monitors and manages Substances of Concern through their internal chemical management tool. It has a procurement strategy to avoid procurement of chemicals classified as persistent.

2.2 Production, purchase, import and selling of persistent chemicals

Indorama Ventures (all 12 points) states clearly that it does not produce, purchase, or sell persistent chemicals. This is an excellent statement because it commits the company to a portfolio free of the most problematic persistent chemicals[1], including those not yet restricted.

2.3 Revenue from persistent chemicals

This year, **Indorama** (full 4 points) states clearly that it does not generate revenue from products containing persistent chemicals.

This year, **Ecolab** (2 out of 4 points) states that among products manufactured, only 0.04% of the company's 2024 revenue was from chemical products containing intentionally added PFAS substances**.**

[1] Defined as substances that meet the criteria of a PBT, vPvB, PMT, vPvM or POP.

2.4 Phase-out roadmap for persistent chemicals

The best practice is to not produce, buy, or sell persistent chemicals altogether, as **Indorama** states (all 4 points).

Lanxess (all 4 points) has a clear phase-out roadmap with deadlines. They flag their end products containing substances meeting the SVHC criteria (>0.1%), a definition which includes the most problematic persistent chemicals. If the company has deemed it possible to substitute these products, it aims to do so by 2030; if not, the product will be withdrawn from the market by 2026.

BASF and Ecolab each get 2 points for their PFAS positions; however, PFAS is just one subgroup of persistent chemicals.

BASF states that it "will phase out chemical products that are formulated with PFAS" and "provide innovative alternatives for our customers."

Ecolab commits "by end of 2026, all chemical products manufactured by Ecolab with intentionally added PFAS will be removed from our global portfolio."

2.5 Acknowledgement of problematic impacts of persistent chemicals

Eastman recognizes that persistent substances that are either (i) bioaccumulative and toxic or (ii) mobile and toxic are a "critical concern" because they can "lead to long-term environmental and human health risks."

Merck states that very persistent PFAS may lead to adverse effects for the environment and humans.

Category 3: Reduce hazardous product portfolio

In 2025, the companies that scored the highest in this category were:

- **Yara** (20 points out of 25)
- **Nutrien** (14 points)
- **Ecolab** (13 points)
- **Indorama** (13 points).

Points are calculated from the known portfolio in EU and US, weighted by revenue.

Category 4: Increase share of safer solutions

4.1 Concept of safer solutions

As before, **SABIC** has a concept of safer solutions based on the World Business Council for Sustainable Development's portfolio sustainability assessment and the Globally Harmonized System of Classification and Labelling of Chemicals (this is not covered in its latest Annual Report).

In a commitment updated this year, **Solvay** commits to continuously reduce SVHCs in all marketed products across the company's value chain "whenever possible".[2] They monitor these substances and develop safer alternatives.

4.2 Share of sales of safer solutions

Indorama claims to not sell any products containing SVHC substances. The definition of hazardous is generally understood as "Meeting the SVHC criteria with references to the Candidate list and the SIN List.

Lanxess reports its share of total sales generated by products that fulfill its high or highest sustainability requirements. In 2024, these products – which do not contain substances with SVHC properties (>0.1%) – accounted for 86% of sales.

4.3 Designing out SVHCS from newly developed products

As before, **Lanxess** (2,25 points out of 6) says it will not develop and market new end-products containing substances >0.1% that have the characteristics of an SVHC.

Indorama (2,25 points out of 6) now has a commitment to zero use of SVHCs.

4.4 Increase share of safer solutions

Indorama (full 2 points**)** has a 100% SVHC-free target.

Lanxess (full 2 points**)** commits to increase the share of safer solutions to 100% by 2030.

4.5 Number of verified safer solutions (C2C and Marketplace)

Points depend on the size of the company:

Syensqo: full 3 points for having 13 published ads on Marketplace.

Ecolab: full 3 points for having 20 published ads on Marketplace.

4.6 R&D for safer solutions

All examples listed here scored the full 2 points:

Lanxess spent €104 million on research and development, mainly to gain new scientific and technical knowledge, search for alternative products and production methods, and apply the results of this research.

Evonik says that it intends to invest €3 billion in "next generation solutions" whose sustainability profile is "above the market reference level"

[2] They focus on SVHC from the EU REACH Annex XIV and Candidate List, but also go further by using their own methodology to identify harmful chemicals, including using ChemSec's SIN list.

BASF says that in 2024, around €0.9 billion of their annual R&D expenditure contributed to “potential sustainable-future solutions” which “make a positive sustainability contribution in the value chain”.

DuPont says that 25% of its R&D spend or investment is focused on safer and more sustainable solutions.