

Why should “No Data, No Market” apply to polymers?

October 2021

What are polymers?

Polymers are chemical substances formed by many similar chemicals, called monomers. Natural polymers include for example wool or DNA. Well known synthetic polymers include polypropylene (PP), polyvinyl chloride (PVC). It is estimated that there are 200,000 different polymers in the EU market.

How they are made

Polymers are made in a process called polymerization that bonds together monomers. For example, polyethylene is formed by bonded units of ethylene, polystyrene from units of styrene, etc. As these reactions are rarely complete, also unreacted or partially reacted residual monomers can be found in the polymer, together with other impurities. Some polymers also require stabilizers to keep their integrity. Therefore, a polymer can be considered a mixture of several chemicals. Some of these ingredients are known to be toxic. For example monomers like vinyl chloride monomer (VCM) or bisphenol-A (BPA) are highly toxic. There is very scarce information about the hazardous properties of other ingredients and residues.

Where can you find polymers?

Polymers are the main ingredient in plastic, resins, coatings, and paints, and they are also used in cosmetics, personal care products and a multitude of other products, to which people and the environment are widely exposed every day and will increasingly be exposed in the future as plastics and other polymeric products continue to build up in ecosystems and production is predicted to continuously grow.

Polymer demand in Europe only for plastic converters was over 51.2 million tonnes in 2018.

Why should we be concerned?

Despite this wide and growing exposure and rising concerns about their impact on health and the environment, there is very scarce information about the hazardous properties of polymers. Contrary to other chemicals, industry has no obligation to report safety data on polymers to authorities.

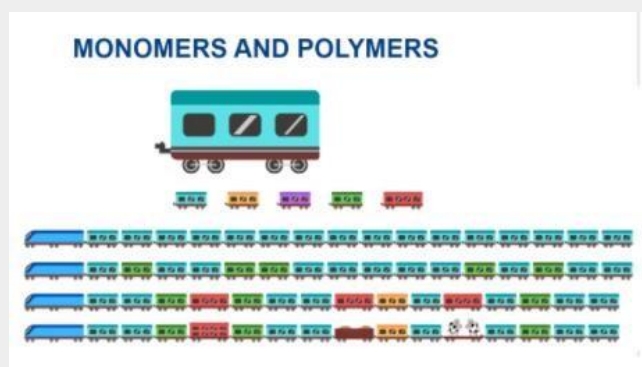


Figure explanation: The carts represent monomers, a polymer may be formed by similar or different monomers, resulting in a very wide diversity of polymers. The figure does not include the unreacted monomers, oligomers, stabilizers and residues that are also found in the final polymer.

What is registration?

Registration is a process established by the REACH Regulation that obliges manufacturers and importers to provide the European Chemicals Agency (ECHA) with information on identities, quantities, uses, exposure and health and environmental hazards of chemicals.

If manufacturers want to market these chemicals in the EU, they have to provide data, in line with the “no data, no market, principle. This information is available at [ECHA's website](#). **Polymers have been exempted so far from registration obligations.**

Why is registration important?

No systematic public information is available today on identity, quantity, uses, and exposure and hazards of the polymers produced and marketed in Europe. There is partial information on many monomers (e.g., BPA, styrene) and additives used in plastics, like phthalates, but we have little to no information on polymers, the main constituents of plastics, while there are many concerns about their environmental and human health impacts.

Registration will provide basic information on the hazards and risks posed by polymers that will allow informed decisions by all stakeholders, including companies and professionals using these polymers. All actors along the supply chain will be better informed: from the chemical companies that manufacture polymers, to plastic converters, workers exposed to these chemicals, plastic article and polymer users, product consumers, waste managers, and water companies, as well as health professionals and academic scientists.

Registration is the first step of regulatory action. As with other chemicals, the information provided should be used to identify polymers that should be prioritised for further regulatory measures under REACH. It will also inform other legislative initiatives on plastics, cosmetics, detergents, etc.

What is happening now?

Industry has successfully delayed the obligation to register polymers under REACH for more than a decade. The Commission has committed under the EU Plastic Strategy and the Chemicals Strategy for Sustainability to require polymers to be registered and is developing a proposal to be included in the ongoing revision of the REACH text.

The Commission has established a [working group](#) together with Member state experts and stakeholders to discuss which polymers require registration, what information requirements should apply and which options are to be considered. The Commission will present its proposal by the end of 2021 and launch an impact assessment in early 2022. NGOs can engage and support by providing data to the public consultation.

What is the problem with the Commission's current proposal?

- Only 6% of existing polymers will be required to be registered (12,000 out of 200,000).
- Polymers massively used and released to the environment will be exempted, such as polypropylene (PP), polyethylene (PE), PVC or polystyrene (PS) used in single use plastics, polyester used in textiles, or polyacrylamides (PAM) used in the production of detergents.
- The criteria used to exclude polymers from registration lack scientific justification as a group of over [30 scientists has stated](#).
- The generation of nano and microplastics is not considered as a hazardous property of polymers and will not have an influence on registration requirements.

How can we address these?

We need to ensure that the registration of polymers is not delayed any further, that all or most of the important polymer groups are prioritised for registration and that the information required from manufacturers/importers is meaningful, complete, of highest quality, and as unbiased as possible.

More information and resources

1. [Poster summarizing the problems of the Commission's proposal, 2021](#)
2. [Scientists' statement on the registration of polymers under REACH, 2021](#)
3. [EEB press release](#) and article in [The Guardian](#)
4. [NGO position paper on the registration of polymers, 2019](#)
5. NGO comments to the Commission's proposal:
 - [EEB&CHEMSEC comments to Wood and PFA Report on Polymer Registration](#)
 - [EEB&CHEMSEC Follow-up to 2nd CASG meeting discussions](#)
 - [Position of NGOs on REACH Requirements for polymer registration](#)
 - [EEB & ChemSec Input to 3rd CASG Polymers](#)
 - [EEB & CHEMSEC Commentary - 4th CASG Meeting.pdf](#)

RETHINK PLASTIC

Rethink Plastic, part of the Break Free From Plastic movement, is an alliance of leading European NGOs working towards ambitious EU policies on plastics. It brings together the Center for International Environmental Law (CIEL), ClientEarth, Environmental Investigation Agency (EIA), European Environmental Bureau (EEB), European Environmental Citizen's Organisation for Standardisation (ECOS), Greenpeace, Seas At Risk, Surfrider Foundation Europe, and Zero Waste Europe. Together they represent thousands of active groups, supporters and citizens in every EU Member State working towards a future free from plastic pollution.

#breakfreefromplastic

#Breakfreefromplastic is a global movement envisioning a future free from plastic pollution made up of more than 2,000 organisations from across the world demanding massive reductions in single-use plastic and pushing for lasting solutions to the plastic pollution crisis.



The EEB is Europe's largest network of environmental citizens' organisations, bringing together over 170 civil society organisations from more than 35 European countries. We stand for sustainable development, environmental justice and participatory democracy.