

## Plastics and Health

October 2019

- **Man-made chemistry deserves a better debate**  
Chemicals are at the heart of the debate about health and toxicity. Man-made chemicals are often discussed in the media and have become a cause for concerns. Such concerns must be addressed as they touch upon essential elements: our health and our environment. The hazardousness of a chemical does not depend on its origin, whether natural or synthetic. Man-made chemicals - including those used to produce plastics - bring numerous benefits to society when used appropriately – they help improve the quality of life and contribute to sustainability in many ways. These benefits would be missing without plastics and the chemicals needed to produce them.
- **Evidence-based policy brings safety**  
Scientific debates are frequent and often rewarding. Controversial debates however, can make good policy decisions difficult. The plastics industry attaches a vital importance to reliable scientific data and their use in policy making. We therefore work together with all stakeholders to use worldwide accepted scientific, transparent and harmonised procedures to distinguish non-conclusive evidence from reliable evidence that provide a solid base for regulators and political decision makers.
- **Chemical risk is to be managed**  
In the chemical area, a growing 'zero-risk approach' has led to discrimination against chemicals because of their abstract hazardous properties or mere presence - rather than for the concrete risk they actually pose to people or the environment. At first glance, it seems to make sense. Why be exposed to hazard if one can avoid it? Such an approach ignores two important factors. Firstly, it is problematic to know whether harm is likely to occur when performing only hazard assessments. Secondly, the same chemical may bring well-proven benefits to society. In order to best guarantee safety, it is therefore essential to identify the risks and weigh them against the benefits. Europe must not fall victim to fear-mongering, but instead develop and apply the best tools to identify and control risks where necessary.
- **Risk management and informed precaution bring chemical safety**  
Risk assessments are the best way to determine if and how exposure to a chemical and its uses are cause for concern. If they are, one can define and apply appropriate risk management measures. When potentially dangerous effects have been identified without being able to quantify the risk with sufficient certainty, precautionary measures can be applied as described in the [Precautionary Principle Commission Communication](#) of 2000. In particular, such measures should be, amongst others, proportional, non-discriminatory, consistent, based on an examination of the potential benefits and costs of action or lack of action, and subject to review.

### Key recommendations:

1. **Bring safety and innovation back together**  
Despite common perceptions, it is possible to ensure safety while creating the right conditions for innovation in Europe. This requires making the best combined use of conclusive science and risk management. Plastics have contributed to many of the most important innovations.
2. **Seek conclusive scientific results**  
When confronted with scientific work, check if data have been gathered, interpreted and communicated according to basic broadly supported rules. Why? Because not all scientific findings are relevant for policy-making; studies, for instance, should be reproducible.
3. **Apply risk management and informed precaution**  
Addressing risk as opposed to a mere hazard approach leads to superior chemicals regulation, because it ensures safety, and avoids compromising progress thanks to an informed management of uncertainty.