Adhesives and sealants for a safe and sustainable future

FEICA's **5 Guiding Principles** in support of a successful European Green Deal

FEICA supports efforts to improve products sustainability, resource efficiency and circularity. Adhesives and sealants perform critical functions to transition towards a carbon neutral and circular economy in key applications such as those in renewables, electronics, construction, the automotive sector, and packaging. Adhesives and sealants enable durability, recycling, CO₂ reduction, repairability, upgradability and material efficiency.

The industry is committed to support the continuous improvement of the chemical and product policy frameworks to enable innovations and societal progress. This paper highlights some key features that are needed for more efficient, pragmatic, and impactful chemicals legislation.

Coherence and shared ambition at the basis of policymaking

3

A chemical policy grounded on the principle of risk assessment

2

Harmonisation enhancing regulatory predictability, crucial for investments and innovation in Europe

4

Technology-neutral regulation as sustainability and innovation driver

5

Enforcement and compliance as a focal point





Coherence and shared ambition at the basis of policymaking

FEICA supports EU initiatives that allow chemicals to be produced and used in a way that maximises their contribution to society while avoiding harm to the planet and to current and future generations.

The European Green Deal agenda provides a unique opportunity to strive for more coherence, address trade-offs and avoid unintended consequences or regrettable substitution.

When considering product phase-outs and restrictions on substances, the European Commission should conduct a thorough assessment of risks and exposure together with a **systematic and**

thorough analysis of their impact on climate change and other critical environmental, social and economic policy objectives, in line with the better regulation requirements. In this regard, we consider that the REACH- and CLP- impact assessments should comprehensively cover adjustment costs and provide an overview of possible targeted compensation measures. In addition, it would be pivotal to integrate the 'one in, one out' approach, as enshrined in the latest Better Regulation Communication, by ensuring that any newly

introduced burdens are offset by removing equivalent burdens in the same policy area.

These guiding principles will be critical when Safe and Sustainable by Design criteria for chemicals and materials are developed, where the interlinkages between existing legislative frameworks like REACH, CLP and RoHS should be considered. It is advisable to assess chemical safety in the broader context of the life-cycle impact of products, including their use phase and the materials for which the chemicals are being used.

Coherence is also fundamental when it comes to the centralised application of the essential use concept. We believe that a risk is posed when regional economic, cultural, and social factors

are not adequately considered when products are excluded from the single market. When and if essential use criteria for chemicals are defined, a holistic coherent approach should be adopted. Some substances, if looked at in isolation, might not be considered 'essential'. However, they could contribute to the sustainability features of an article, ensuring greater durability and thus contributing to circular economy objectives. Therefore, we consider that the essential use concept should be strongly linked to scientific assessment and be implemented only where an unacceptable risk is identified on EU level or where adequate control cannot be guaranteed (under REACH).

SYSTEMATIC AND THOROUGH
ANALYSIS OF REGULATION REQUIREMENTS
AND THEIR IMPACT ON CLIMATE CHANGE
AND OTHER CRITICAL ENVIRONMENTAL,
SOCIAL AND ECONOMIC POLICY OBJECTIVES



Adhesives and sealants contribute to material efficiency and energy savings in the automotive sector, hence being a key player for Europe's transition towards climate neutrality. Adhesive bonding in car production helps reduce the vehicle's weight and the CO₂ emissions of the finished car. It has also proved to be the most energy efficient joining technique, having the lowest Global Warming Potential. Adhesives and sealants help the car industry meet its challenges of developing more environmentally responsible solutions for the future.

For more details about this Good Practice, see the document 'Moving more with less CO₂ - Bonding in the automotive industry'.



Harmonisation enhancing regulatory predictability, a crucial element for investments and innovation in Europe

Long-term investment cycles in strategically important supply chains are strongly influenced by regulatory predictability.

FURTHER HARMONISE EU RULES WITH FEICA supports the Commission's ambition to move towards a INTERNATIONAL LEGISLATION TO ENSURE process of 'one substance - one assessment' and to provide greater transparency when prioritising action to deal with A LEVEL PLAYING FIELD THAT AVOIDS chemicals. Streamlining the **hazard assessment** of substances DISRUPTIONS TO TRADE. will contribute to enhanced predictability. Until now, multiple agencies have assessed the same chemicals via different legislation. This new principle will likely avoid contradicting scientific opinions. Yet, whilst it is important to use one set of hazard information defined by the intrinsic properties of the substance, the expertise on risk assessment for the different end uses should remain with the existing agencies responsible. A complete risk assessment can be achieved only by accounting for identified hazardous properties, specific use of the substances, migration potential and resulting exposure for a relevant and specific evaluation.

Another fundamental point is to further harmonise EU rules with international legislation to ensure a level playing field that avoids disruptions to trade. Uniform criteria across regulatory tools are important to create a viable basis for companies, especially SMEs, to take the necessary steps for innovation and investments. Hence, we support the Commission commitment to promote the implementation of the Globally Harmonised System of Classification and Labelling of Chemicals (UN GHS) and to adapt criteria/hazard classes therein to avoid deviation between international and EU rules. However, we believe that the UN GHS should be revised first and then EU rules adjusted accordingly.



A chemical policy grounded on the principle of risk assessment

The EU regulatory framework on chemicals and products should stay proportionate, well-assessed and grounded on science. The ongoing revisions of both REACH and CLP regulations should not side-line the principles of risk assessment and science-based decision-making which are at the core of EU chemicals legislation. **Science-based** risk assessments that consider the hazardous properties of a substance and the level of exposure to humans and the environment allow for the manufacturing and use of safe products through risk management mechanisms, when needed. Risk assessments driven by scientific expertise should play a decisive role when limitations are placed on the availability of certain

substances or solutions on the EU market. **Ensuring safe use through evidence-based policy-making should be the cornerstone when defining safe chemicals**.

ENSURING SAFE USE THROUGH
EVIDENCE-BASED POLICY-MAKING
SHOULD BE THE CORNERSTONE WHEN
DEFINING SAFE CHEMICALS.

Moving forward, we would caution against extending the so-called 'generic risk management approach', where risk management measures would automatically be triggered by hazard assessment and classification, without an 'unacceptable risk' having been proved. This is especially important for professional users, where there is no evidence to suggest that the fundamental REACH risk assessment framework is inadequate. Such a black-and-white approach increases the risk of policy incoherence. We contend that the 'generic risk management approach' should be limited to CMR for consumer uses.

We would also urge the European Commission to take a pragmatic approach to address **combined exposure**. It is fundamental to identify, in a scientific way, real-life exposure that needs to be targeted through legislation. Recent field studies¹ and model predictions indicate that for a given type of effect, a large part of the combined effects from multiple chemicals in the environment is caused by a relatively small fraction of the chemicals involved. Moreover, REACH already includes several conservative default assessment factors to derive exposure limits with safety margins. This already leads to an overall factor ensuring a good safety margin that also covers possible combination effects. With an additional general and not science-based factor like MAF, many ingredients may no longer be available for adhesives and sealants products. This in turn may result at least in additional testing, higher tier calculations and, in many cases, the ban of single substances even in adhesives and sealants that have been used safely for decades.



Technology-neutral regulation as sustainability and innovation driver

The adhesive and sealant industry has a long track record of developing innovative solutions to address sustainability challenges as an integral part of critical value chains. The wide variety of substances, technologies and application methods in the industry allows to find the best combination for the desired performance. Most of these innovations rely on the customisation of polymers. It is therefore essential to ensure proportionate polymer registration requirements with a minimum of administrative burden.

ENSURE PROPORTIONATE POLYMER REGISTRATION REQUIREMENTS WITH A MINIMUM OF ADMINISTRATIVE BURDEN Costly and complex registration requirements would be a disproportionate economic, technical, and organisational burden, especially for small and medium enterprises (SMEs). Such requirements would lead to the phase-out of an ever-evolving critical technology, as adhesives and sealants are widely used in important sectors for the fulfilment of the EU Green Deal targets, such as in electronics and construction.

As formulators, we would be obliged for the first time to register a huge number of new polymers, whose individual production volume is comparatively low and whose life cycle on the market is short (less than 3 years on average). We consider that those requirements should be tiered to tonnage bands. Registration requirements, if not based on pragmatic grouping criteria and complemented with exemptions, would end up creating a consistent, comparative disadvantage for the adhesives and sealants industry. We risk striking a deathblow

for outstanding and versatile fixing solutions. Customised polymers allow for the development of adhesives that apply innovative solutions offering debonding-on-command, enabling the easy separation of bonded components for repair or recycling while ensuring long durability.

Adhesive and sealant products can be provided which are able to debond on demand with the use of electromagnetic irradiation (i.e., thermal treatment) that is focused on the bonding line and is non-destructive to the assembled parts. Other debonding solutions entail chemical or mechanical techniques. M-Resins technology allows the reseal of opened flexible packaging of food, thus improving conservation and saving additional packaging material (please see here the FEICA Good Practice Story). Adhesives for rubber bonding extend the longevity of conveyor belts by allowing on-site repair, which saves resources and reduce downtime. For more details about this Good Practice, click here. Repairability is one of the most important drivers in the circular economy. In many cases, the function of a defective part can be restored in a cost-effective way by the use of adhesives.

Enforcement and compliance as a focal point

Enforcement mechanisms are critical to ensure a level playing field that enables EU competitiveness by barring non-compliant goods from the EU market, whether they are produced within the single market or outside the EU.

The EU already has one of the most advanced chemical and environmental legislation worldwide. Building on this strong record, we would encourage the European Commission to ensure that effective implementation is a primary objective to ensure that imports and online sales also comply with EU rules and do not benefit from an unjustified comparative advantage.

ENFORCEMENT MECHANISMS ARE CRITICAL TO ENSURE A LEVEL PLAYING FIELD THAT FNABLES EU COMPETITIVENESS



FEICA is registered in the EU Transparency Register with ID no. 51642763262-89

FEICA - Association of the European Adhesive & Sealant Industry Rue Belliard 40 box 10, 1040 Brussels, Belgium Tel: +32 (0)2 896 96 00 info@feica.eu

www.feica.eu

FEICA® Publication ref.: FMI-EX-K07-040