

## EuPIA statement on the applicability of the Single-Use Plastics Directive (SUPD) and its Guidelines to Functional Coatings<sup>1</sup>

*This statement is the EuPIA interpretation of the SUPD and its Guidelines for Functional Coatings. Printing inks are not in scope of the SUPD. This statement is not legally binding.*

### PREMISES

The SUPD (Single-Use Plastics Directive) being a Directive, it needs to be transposed to EU member state national law that determines how to achieve its goals. In the process, some variations may happen in interpretation and implementation, so precise scope evaluation can only be done at country level.

The Guidelines of the SUPD is a non-binding document, which means that the document itself is not legally enforceable.

The Packaging and Packaging Waste Regulation (PPWR) is integrating the SUPD but not modifying it. Important provisions such as the blanket ban of plastic material without threshold in the single use scope are maintained.

The SUPD is covering a specific limited scope of packaging formats, which have been further listed in the PPWR Annex V<sup>2</sup>. All packaging formats are regulated by the PPWR framework.

### 1. WHAT IS PLASTIC?

According the PPWR and SUPD definition

*“‘plastic’ means a material consisting of a polymer within the meaning of Article 3, point (5), of Regulation (EC) No 1907/2006, to which additives or other substances may have been added, and which is capable of functioning as a main structural component of packaging, with the exception of natural polymers that have not been chemically modified.”*

Synthetic polymers are a sub-set of polymers. Polymers could be also natural and found in nature; in such case they have been polymerised in the environment. These natural polymers are to be differentiated from bioderived polymers, industrially synthesized using a natural source of monomer (building blocks to make polymers). Bioderived polymers are also a subset of polymers.

Chemically modified polymers are a sub-set of polymers. Inside chemically modified polymers, there are natural polymers which have been subjected to a chemical process after extraction that aimed to change their chemistry.

The exact wording used in the SUPD Guidelines is as following:

*“Unmodified natural polymers, within the meaning of the definition of ‘not chemically modified substances’ in point 40 of Article 3 of Regulation (EC) No 1907/2006..., should not be covered by this Directive as they occur naturally in the environment. Therefore, for the purposes of this Directive, the*

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<sup>1</sup> The term Functional Coatings in this document is always referring to definition in a dedicated EuPIA Information Note : [https://www.eupia.org/wp-content/uploads/2025/04/202504\\_scoping\\_functional-coatings\\_final.pdf](https://www.eupia.org/wp-content/uploads/2025/04/202504_scoping_functional-coatings_final.pdf).

<sup>2</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L\\_202500040&pk\\_campaign=todays\\_OJ&pk\\_source=EUR-Lex&pk\\_medium=X&pk\\_content=Environment&pk\\_keyword=Regulation](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202500040&pk_campaign=todays_OJ&pk_source=EUR-Lex&pk_medium=X&pk_content=Environment&pk_keyword=Regulation)

*definition of polymer in point 5 of Article 3 of Regulation (EC) No 1907/2006 should be adapted and a separate definition should be introduced”*

*“Plastics manufactured with modified natural polymers, or plastics manufactured from bio-based, fossil or synthetic starting substances are not naturally occurring and should therefore be addressed by this Directive. The adapted definition of plastics should therefore cover polymer-based rubber items and bio-based and biodegradable plastics regardless of whether they are derived from biomass or are intended to biodegrade over time”*

**Plastics are a sub-set of synthetic, bioderived and chemically modified polymers.** Not all synthetic or chemically modified polymers are plastics, in the sense that not all synthetic or chemically modified polymers could be used to make a structure (film, sheet, 3D shape like a tray, bottle, chair, window frame etc). **The capability of functioning as a main structural component is a key differentiating criterion to know whether a synthetic, bioderived or chemically modified polymers is a plastic or not.**

**Non-chemically modified natural polymers** are always considered as non-plastic by the SUPD in any case, even if they could be used as a main structural component.

Whereas EU countries’ implementations refer to this definition, interpretation is sometimes ambiguous. To the question “*What is plastic?*” the Netherlands FAQ<sup>3</sup> is answering:

*Plastics are:*

- *All polymers that do not occur naturally.*
- *Natural polymers that have been chemically modified.*

*This definition also includes products made from biobased and biodegradable plastics. And products (such as wet wipes) made from viscose.*

*The European Commission has published [a manual](#) that Member States can use to assess if products are made of plastic.*

The first sentence is broader than the PPWR/SUPD official definition as the Netherlands FAQ do not mention the main structural component criteria. It just state “*All polymers that do not occur naturally*”. This seems in contradiction to the SUPD manual’s link given as a reference point to decide if a product is made of plastic or not.

Secondly the Netherlands FAQ is stating that viscose is to be considered as plastic whilst the SUPD Guidelines, which is the “*manual*” the FAQ refers to, clearly states the contrary in section 2.1.3

*Natural polymers that have not been chemically modified*

*This means that, for example, regenerated cellulose, e.g. in form of **viscose**, lyocell and cellulosic film, is not considered to be chemically modified, as the resulting polymers are not chemically modified compared to the ingoing polymer.*

## 2. NON SELF-SUPPORTING LAYER

According to EuPIA’s definition, Functional Coatings are liquid formulations that are applied onto the surface of a substrate using a transfer method changing its features as well as adding technical functionality. Typical transfer methods are printing and wet coating technics: flexography, rotogravure, offset, rod, blade, air blade or curtain coater.

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<sup>3</sup> <https://business.gov.nl/sustainable-business/environment/single-use-plastics-these-are-the-rules/#art:frequently-asked-questions>

Importantly Functional Coatings are not main structural components in the applications in scope. **They are not extruded, injected, calendared or molded.** That doesn't prevent that part of the chemistry in

the formulation could not be used in other applications such as a molding process. However, in the EuPIA scope of applications they are not. As they are not themselves structural.

To just give two illustrative examples:

- PE pellets to make PE extruded film on paper are not in scope of Functional Coatings whilst PE water-based suspension are in scope.
- Acrylic resins-based suspensions are in scope of Functional Coatings and cannot be used in molding process or cannot be processed into a main structural component.

In the European Union Guidelines on Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food, a coating is defined in Section 2.2 as "*non-self-supporting layer composed of substances applied on an already existing substrate in order to impart special properties or improve technical performances of the finished article*".

**All Functional Coatings are non-self-supported layers.**

### 3. MAIN STRUCTURAL COMPONENT

As mentioned before, Functional Coatings according to the EuPIA scoping paper are NOT used as main structural components in their applications.

The Article 3(1) of the SUPD Directive in conjunction with Article 3(5) of Regulation (EC) No 1907/2006 (REACH Regulation) provides the following definition: "*A plastic within the meaning of the Directive exists if an object - for example a cup or plate - consists of a polymer that can act as the main structural component.*"

Accordingly, in the case of a paper/cardboard cup, the paper/cardboard, corresponding to the framework of fibre material, is to be regarded as the structuring material, while in case of a plastic cup, the plastic forms the supporting structure. Classification is therefore based on the dominant material component, which determines the physical shape and stability of the end product.

Nevertheless, there are some countries' national implementation of the SUPD, like the German Einwegkunststoffverbotsverordnung (Single Use Plastics Prohibition Order), also known as the EWKVerbotsV, indicating that even if the synthetic polymer used is not actually functioning in the single use application as the main structural component, if it has the potential to be used as a main structural component in other applications, then the synthetic polymer should be considered as plastic under the EWKVerbotsV.

Following the German interpretation, a polyethylene (PE) water-based suspension is containing a chemistry that could be used in other applications to make a main structural component (like a film for instance). Therefore, a PE water-based suspension could be considered as plastic layer following the EWKVerbotsV definition.

In reverse, typical acrylic resins-based suspension used in the Functional Coatings cannot be used as a main structural in any applications. Therefore, these typical acrylic resins water-based suspensions are considered as **non-plastic** layer in the EWKVerbotsV definition.

The FAQ of the EWKVerbotsV answers the question "*Are water-based/aqueous dispersions exempt from the application of the EU single-use plastics directive/EWKVerbotsV?*", as following: "*There is no general exception for these products. It depends on the nature of the coating (dispersion barrier).*"

If the polymer used in the coating fulfils the criteria for "plastic", i.e. the definition of the term plastic according to the SUPD or EWKVerbotsV, then the entire product containing this polymer is in the SUPD scope and not exempted.

As already explained in the definition of the term "plastic" in accordance with the Single Use Plastic Directive (SUPD) and the German Single Use Plastic Prohibition Order (EWKVerbotsV), it is essential for the classification of a material as a plastic that it can perform as a main structural component.

**There is no general SUPD exemption nor ban for Functional Coatings in the EWKVerbotsV plastic definition. The formulations should be assessed case by case.**

Functional Coatings also include formulations based on **non-chemically modified natural polymers** which are directly exempted and are not considered as plastic neither under the SUPD and PPWR definition.

#### 4. PROTECTING PAPER AND BOARD AGAINST WATER OR FAT

Section 2.2.1 of the SUPD reads:

*"However, when a **plastic** coating or lining is applied to the surface of a paper- or board-based or other material to provide protection against water or fat, the final product is considered a composite product composed of more than one material of which one is **plastic**. In this case, the final product is seen as being made partly of **plastic**. Hence, single-use paper- or board-based products with plastic coating or lining are partly made of plastic and fall within the scope of the Directive."*

This section is referring specifically to **plastic** coating or lining.

Therefore, any Functional Coatings that would be assessed as non-plastic, even if providing protection against water or fat, is NOT in scope here.

The protective function of a Functional Coating doesn't define them as plastic, only the plastic definition reference may (PPWR/SUPD with variations depending on countries' interpretation as mentioned in section 2).

#### CONCLUSION

**There is no general SUPD ban for the sub-set of protective paper & board formulations inside the Functional Coatings. These formulations should be assessed case by case against the plastic definition.**

**EuPIA strongly recommends contacting the member state's authority to confirm the country's implementation of the SUPD in law, and particularly the plastic definition.**

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