



# Verband der deutschen Lack- und Druckfarbenindustrie e.V.

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Position of the German paints and printing inks industry association

Verband der deutschen Lack- und Druckfarbenindustrie e. V. (VdL)

on

## **ECHA Annex XV Restriction Report / Proposal for a Restriction**

### **Substances Names: “Intentionally added Microplastics”**

This document supplements the position of the German chemical industry association (Verband der Chemischen Industrie e.V. / VCI), regarding the impact of the proposed labelling and reporting requirements on the paints and printing inks industry (proposal for restriction in table 3, version 1.1 of 20 March 2019).

#### **1. Executive summary**

ECHA’s restriction proposal contains a **definition of microplastics**, which is **too broad and leaving much room for interpretation**, and which will make its implementation and enforcement challenging.

The proposed labelling and, in particular, the comprehensive reporting requirements for manufacturers of paints, coatings and printing inks and also for industrial users of these products **involve a large amount of bureaucracy – while they come nowhere near the given objective of tracking uses and potential releases to the environment**. The reasons are, firstly, that consumers and craftspeople, who use large shares of building paints, are exempted from the reporting requirements. Secondly, a total volume of 1.2 million tonnes of paints, coatings and printing inks is annually exported to other EU Member States.

The obligation of industrial users (e.g. in the automotive and printing industries) to estimate the release of microplastics to the environment overlooks that **comprehensive water protection rules are already in place for industrial sites**. These rules regulate how to treat waste waters prior to their direct release into waters or their indirect release. Thus, the above proposal stands in contradiction the **principle of subsidiarity**.

The comprehensive labelling and reporting requirements for the paints and printing inks industry, which only accounts for a fraction of microplastics used, are **ineffective and disproportionate**. Either the whole supply chain would need to be covered (with a further increase of the workload and costs for the industry), or it would be sufficient to exclusively cover those industries that manufacture microplastics or place them on the market for the first time.

Most microplastics stem from decomposing plastic wastes, tire abrasion, or laundering of synthetic clothing. Only a very **minor share** originates from **intentionally added microplastics**. The disposal of plastic wastes in the environment is a global problem, and more effective solutions for waste avoidance and recovery need to be found. The proposed regulation is disproportionate, scientifically inadequate and of no benefit to the environment.

Therefore, we suggest

- a **clearer and more focused definition of the scope** of the proposed restriction (Table 3, No. 2);
- a **deletion of reporting requirements for industrial uses** (Table 3, No. 8);
- industrial producers should be **free in providing “instructions for use”** according to the specifications of the products (Table 3, No. 7).

## **2. Impact on the German paints industry**

The German paints and printing inks industry association (Verband der deutschen Lack- und Druckfarbenindustrie e.V. / VdL) represents the manufacturers of paints, coatings and printing inks in Germany. The recently published proposal for a restriction of the use of microplastics under REACH Annex XV has major consequences for our manufacturers and many of their products.

Around **2.5 million tonnes of paints, coatings and printing inks** are manufactured annually in Germany; their manufacture in Europe totals ca. 9 million tonnes. With the existing definition of microplastics, the **labelling and reporting requirements** of the proposed regulation would impact many of these products (see below).

In Germany, 847,000 tonnes of building paints, 565.000 tonnes of industrial coatings and 257,000 tonnes of printing inks are used every year in Germany – while 5.9

million tonnes of building paints, 4.1 million tonnes of industrial coatings, and 960,000 tonnes of printing inks are sold in Europe. Essentially, they are used in the construction sector as indoor wall paints, façade paints and wood coatings, in the industrial sector as automotive OEM paints, anti-corrosion coatings and powder or furniture coatings, and in the printing sector in flexo or offset print technologies. In Germany, 378,000 tonnes of paints and coatings are annually distributed to private end consumers.

The ECHA proposal includes labelling and, in particular, comprehensive reporting requirements for the manufacturers and industrial users of many paints, coatings and printing inks (no. 7 and 8 of table 3).

### **3. Reporting requirement (regulation proposal no. 8 of table 3)**

#### **a) Aim and scope of the reporting requirement**

Comprehensive annual reporting requirements are to apply for all mixtures that contain microplastics and do not fall under the derogation of no. 6. The following justification is given for this reporting requirement:

*“The information gathered will allow the **tracking of the identity and quantities of the microplastics used and released to the environment** in certain derogated uses and allow in the future for adaptations to the restriction to be made using this information, where these are considered necessary.”* (see 2.2.1.5 Reporting requirement).

According to the proposal, annual reports – which are to be sent electronically to ECHA – include the following points:

- a. the **identity of the polymer(s)** used in the previous year;
- b. a **description of the use** of the microplastic,
- c. the quantity of microplastics used in the previous year, and
- d. the **quantity of microplastics released to the environment**, either estimated or measured in the previous year.

The reporting requirement applies to:

1. any **downstream user using** substances or mixtures containing **microplastics** that are placed on the market *for use at industrial sites* (see no. 4a.);

2. any importer or **downstream user placing on the market** substances or mixtures on the market which contain microplastics
  - a. where the physical properties of the microplastics are **permanently modified** when [...] used such that the polymers no longer fulfil the meaning of a microplastic [...] (see 5.b), or
  - b. where the microplastic is **permanently incorporated into a solid matrix** when used (see 5.c).

#### b) Impacts on our industry

ECHA assumes a share of 20% of microplastics in paints and coatings, however, without taking into account the diversity of paints, coatings and printing inks and their different proportions of microplastic. In fact, polymers are used according to ECHA's microplastics definition in a large portion of paints, coatings and printing inks – mainly as film formers and also as additives.

**Film-forming function: Polymers** according to the definition in table 3 of the proposal are used as **binders** in many applications, including paints, coatings and printing inks. Binders can be **liquid** (e.g. oils), **semi-solid** (e.g. waxes) or **solid** polymers (e.g. resins). In waterborne products the polymers are dispersed in water while in solvent based products the polymers are dissolved in organic solvents. Binders encase the solid components of paints and varnishes, i.e. pigments and fillers, and form solid polymer-containing particles. Regarding the latter, it remains open whether the proposal applies to dissolved solid polymers ("solid"?).

The function of **binders is to serve film formation** by binding the components of paints and coatings with each other and with the substrate. Only binders enable film formation in coatings through polymerisation, polycondensation or polyaddition. Film formation, e.g. drying and hardening, brings about a hard and mechanically resistant layer that adheres to the substrate. Through the physico-chemical process of film formation, **binders lose the particle property of microplastics** according to the definition under 2 and, consequently, fall under the mentioned **rule 5.b**. Furthermore, these are firmly **incorporated in a polymer structure** (binder matrix) by curing, so that they are subject to **rule 5.c** of the restriction proposal.

The share of binders in the composition varies from 2% (printing inks) over 25% (building paints) to up to 80% (powder coatings, printing inks).

**Non-film forming function:** Small quantities of polymer-based additives (e.g. **waxes or spheres**) are added to coating materials, in order to **improve or modify their properties**. Additives for paints and coatings are **bound in a polymer structure** in curing and fall under **rule 5.c** of the proposal.

Additives are used in paints, coatings and printing inks in quantities from 2 % to 10%.

The *reporting requirement under 1* concern:

- Manufacturers of binders;
- ca. 250 companies in Germany who – as “downstream users” – use binders for the manufacture of **paints, coatings and printing inks**;
- many **industrial users of paints, coatings and printing inks** who – also as “downstream users” – would be subject to reporting, for example
  - automotive industry
  - metal industry
  - print shops
  - furniture industry
  - electrical industry
  - mechanical engineering companies
  - corrosion protection businesses
  - industrial window coating businesses.

The *reporting requirement under 2* also concern the ca. 250 manufacturers of paints, coatings and printing inks as well as many thousands of users and retailers who mix paints/coatings according to their customers’ wishes in **mixing stations** – where individual, tailor-made paints/coatings are placed on the market at the point of sale.

### c) Criticism of the reporting requirement

Overall, the **reporting requirements constitute one-sided and unjustified burdens** on industrial users. We doubt that ECHA is aware of the manifold uses of paints and coatings in the industrial sector. It is difficult to estimate the total number of industrial users of paints, coatings and printing inks. In Germany alone, **more than 60,000 companies should be impacted**, including roughly 8,000 print shops.

Already now, industrial users of paints, coatings and printing inks are subject to **extensive legal provisions on water protection**; these are not taken into account in the ECHA proposal. For example, the German ordinance on the requirements to waste release into waters ([Verordnung über Anforderungen an das Einleiten von Abwasser in Gewässer / AbwV](#)) regulates how to treat waste waters from various industrial sectors before their direct release into waters or indirect release (e.g. annex 40 Metal processing or annex 56 Manufacture of printing plates, print products and

graphic products). Furthermore, all industrial users must comply with local water protection laws and regulations.

Industrial sites have **wastewater treatment plants** which, inter alia, limit the release of solids. The water treatment function is checked regularly. Usually, after-treatment of wastewater takes place in municipal sewage plants, as only very few sites are direct releasers. There is no discernible environmental hazard that would justify a reporting requirement beyond the existing obligations under the AbwV.

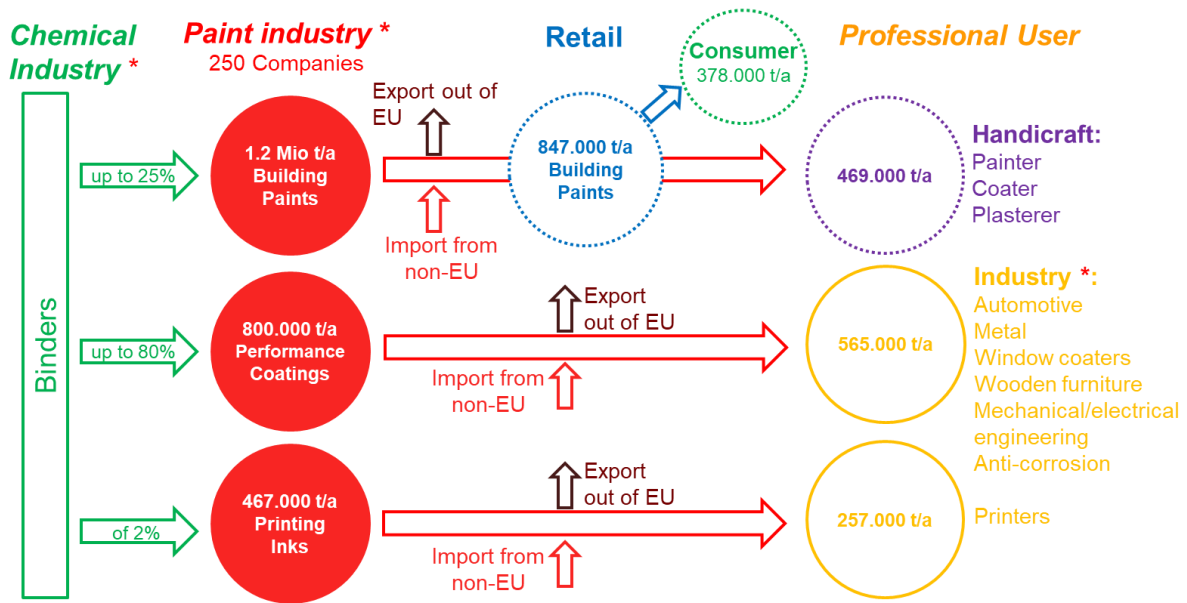
Industrial waste is usually disposed as hazardous waste. Here, a direct release into sewage systems or waters is invariably banned. Also, waste from industrially used paints, coatings and printing inks in large containers can be returned to their suppliers, enabling a recovery of solvents and water. The thus recovered solvents and water are run in closed process loops and reused for new products. Recycled residues of materials can partly be reused for new products, or they are disposed as hazardous waste (e.g. by way of incineration). Containers are usually cleaned through washing, and the washing water is treated according to the applicable industry standard before its reuse.

Moreover, industrial users are trained in regular intervals in the use of substances and mixtures, taking into consideration the existing European and national legal provisions on occupational health and safety (OHS) and environmental protection. Information about the correct handling, storage and disposal of products is also available in safety data sheets.

The ECHA proposal also ignores the fact that paint manufacturers do not obtain details – e.g. on the identity of the polymers used in pre-products (for example, binders and additives) – from their upstream suppliers. The reason is that otherwise confidential business information would need to be disclosed. However, without such particulars neither the paint manufacturers nor the industrial users can report any information, for instance, about the identity of polymers. Finally, the question arises what sense a reporting requirement would make for the individual polymers.

A reporting requirement at user level brings **no additional benefit while it causes major extra effort and costs.**

Reporting obligations for *downstream users* \*:



By contrast, **retailers and consumers are exempted** from the reporting requirement (no “downstream users”). **Craftspeople are exempted** too (no “party placing on the market”). However, as shown by the flow chart, especially building paints – which ECHA resorts to for justifying a regulation – are mainly distributed by retailers and used by professional craftspeople (painters, varnishers, plasterers) and consumers. An estimated total of **200 million paint containers** (paint buckets and paint cans) annually are used in this sector in Germany.

Already for this reason, **tracking** (“tracking of the identity and quantities of the microplastics used and released to the environment”) – as pursued with the reporting requirement – is **factually impossible** in the building paint sector. Moreover, every year 1.2 million tonnes of paints, coatings and printing inks are **exported** from Germany to non-EU countries. These exports would need to be subtracted from the reporting by manufacturers.

d) Costs and consequences of the reporting requirements:

The reporting requirements for manufacturers of paints, coatings and printing inks under the restriction would impact in Germany some 250 companies; most of them are small and medium-sized enterprises (SMEs). Especially for smaller businesses, which are the majority, **the proposed annual reporting requirement would constitute an excessive strain**. Without an impact assessment, it remains unclear what effort and costs the reporting requirement precisely involves. Based on the current proposal, our member companies (depending on size and product portfolio) estimate at least 50% of one full-time position for a suitably qualified person. For our

membership, this would mean **additional costs of at least 6 million euros per annum**.

For example, at a medium-sized paint manufacturer with a total workforce of 100, currently 8 staff are working in the laboratory. Out of the latter, **already now 2 staff are exclusively dealing with the requirements of the chemicals legislation** (focusing on REACH and CLP). If 1 staff member was additionally deployed for bureaucratic reporting requirements, that would lead to a **further weakening of competitiveness**, e.g. due to a lack of time for developing new products.

e) Recommendation:

The reporting requirement of proposal no. 8 should not apply to uses at industrial sites (better “industrial installations”, see annex XVII REACH), because (1.) there are already sufficient regulations in place at national and regional level to prevent the release of microplastics, (2.) the reporting requirements as proposed would not be sufficient to achieve the monitoring target and (3.) they would be unproportionate. Therefore, **the reference in no. 8 to no. 4a should be deleted**.

**4. Labelling requirement (regulation proposal no. 7, table 3)**

Labelling requirements are to apply for all mixtures that contain microplastics (according to the definition of rule no. 2) and do not fall under the restriction of rule no. 6. These labelling requirements cover

1. **manufacturers**, importers and downstream users, responsible for the placing on the market of a substance or mixture containing microplastics
  - a. where the physical properties of the microplastics are **permanently modified** when [...] used such that the polymers no longer fulfil the meaning of a microplastic [...] (see 5.b), or
  - b. where the microplastic is **permanently incorporated into a solid matrix** when used (see 5.c).

According to rule no. 7, the manufacturers, importers and downstream users responsible for the placing on the market of paints and coatings containing microplastics must ensure that every label and/or safety data sheet includes “**instructions for use**” to avoid releases of microplastics to the environment. This **labelling requirement** would impact **ca. 250 manufacturers of paints, coatings and printing inks**; most of them are SMEs.



The regulation does not make any concrete demands to such labelling. It merely stipulates that labelling is to comprise *“any relevant instructions for use to avoid releases of microplastics to the environment, including the waste lifecycle stage”*. Even this provision stands in contradiction to the **principle of legal certainty**, which means that the effects of the law must be manageable for the obligor.

Already now, the labels for **consumer products** comprise “instructions for use” for an appropriate disposal of liquid paint residues and completely empty containers. Existing labelling points out that completely empty container must be channelled into recycling, liquid material residues can be returned to collection points for waste paints/coatings, and dried material residues must be disposed as construction and demolition waste or household waste.

At present, in Germany almost all wall paints and coatings for consumers bear the German **ecolabel** “Blauer Engel” (Blue Angel). The award criteria (RAL-UZ 12a – low-pollutant varnishes and RAL-UZ 102 – low-emission interior wall paints) oblige manufacturers to state on the label that tools (e.g. brushes and rollers) should be cleaned with water and soap immediately after use. Therefore, any different instructions based on the ECHA proposal would cause conflicting objectives with the instructions of the ecolabel.

Usually, **professional painters** in Germany use separator facilities or let brushes and rollers dry and then dispose them properly. Given these cleaning activities, a release of microplastics to the environment is almost ruled out in the professional sector. Furthermore, liquid paint residues and completely empty containers are disposed or recycled exclusively in disposal systems.

Yet another adaptation of labels hardly offers any advantages so that it is unnecessary. Any change in labelling takes much time and involves disproportionate spending. Existing labels that are no longer fit for use need to be disposed with costs.

Therefore, we do not need any prescribed phrases, as the **manufacturers have already implemented instructions for use** on the labels of consumer products.