



# ERF explanation letter on microplastics

## SUMMARY AND RECOMMENDATION:

---

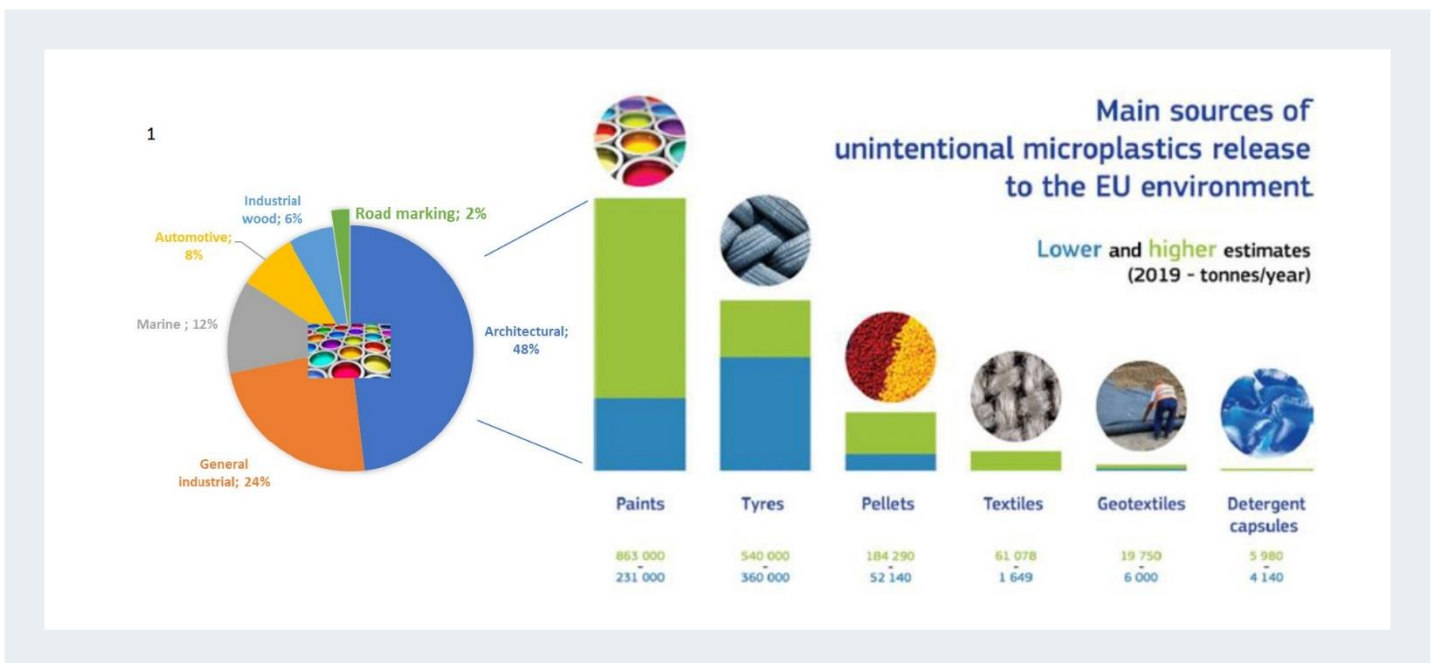
- Road markings do not contain any intentionally (previously known as primary) added synthetic polymer particles (microplastics) and are therefore not subject of the commission regulation (eu) 2023/2055 of 25 September 2023 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament;
- Release of microplastics from road markings into the environment is unintentional (previously known as secondary), caused by abrasion from traffic;
- Road markings serve as essential safety devices and should not be regulated like decorative paints;
- The emissions of microplastics from road markings constitute only 2% of the overall emissions attributed to products classified as 'paints' by the EU Commission. Yet, the contribution of road markings to the release of microplastics, particularly into the marine environment, is considered overestimated and lacks scientific data and understanding of the road marking technology.

To reduce microplastic emissions while still delivering road safety, ERF recommends selecting durable high-quality road markings and implementing proactive maintenance programs where the road marking system is renewed as soon as the performance falls below intervention levels based on retroreflectivity.

Read more about the recommendation in our position paper:  
<https://erf.be/publication/microplastics/>

In view of the recent adoption of several initiatives of the European Commission aiming at reducing synthetic polymer particles (microplastic) pollution ([https://environment.ec.europa.eu/topics/plastics/microplastics\\_en#timeline](https://environment.ec.europa.eu/topics/plastics/microplastics_en#timeline)), the ERF wishes to underline that road markings are not subject to the Commission regulation (eu) 2023/2055 of 25 September 2023 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament. Microplastic release from road markings in the environment is a consequence of abrasion from traffic and must be considered unintentional, while this regulation aims at reducing the microplastics intentionally added to certain products.

The EC usually classifies road markings as "paints". As we see in the following chart (source: "EU Action against microplastics <https://op.europa.eu/en/publication-detail/-/publication/048dd075-6e47-11e1-e9220-01aa75ed71a1>), paints are included as unintentional source of microplastics in the environment.



1 The graph is based on data derived from the study by Paruta et al. (2022), as referenced in the EC document 'EU Actions against Microplastics' (2023)

Yet, road markings are essential to safe, efficient and inclusive highway systems, helping enable the effective movement of people and goods, reducing collisions and harmful impacts on vulnerable road users and communities. As such, they contribute to the ambitious goal of a Europe without road fatalities by 2050 contained in the “Vision Zero” strategy published by the European Commission in November 2022 ([https://cinea.ec.europa.eu/publications/eu-road-safety-towardsvision-zero\\_en](https://cinea.ec.europa.eu/publications/eu-road-safety-towardsvision-zero_en)). For this reason, the societal benefits of good quality road markings should be taken into consideration, and the EU Commission should not treat them as decorative paints when it comes to regulation.

The same study used as a source in the document (Paruta et al, 2022) shows how “road markings is the least important”, accounting for 2% of the overall microplastic emissions coming from “paints”:

As stated in the position paper released by ERF in December 2022 “Road markings and microplastics”, a good portion of the scientific literature on this subject has been dominated by numerous misconceptions and false assumptions due to the lack of industry experts' involvement and the absence of data from practice.

Unfortunately, the report mentioned above makes no exception. The study (performed in a “datascarced context” by the authors’ own admission) is indeed based on many additional inaccurate statements and assumptions (<https://www.sciencedirect.com/science/article/abs/pii/S136192092300137>). It is also worth noting that “the intention of the report is not to provide a precise assessment, but rather to estimate the order of magnitude of paint leakage, to determine if paint makes a significant contribution to the total plastic leakage”.

Since assessments are still ongoing to identify the most effective measures to tackle microplastic pollution from road markings and other products, the ERF is happy to contribute by bringing the viewpoint of its members, relevant and trusted stakeholders operating in the industry.