



From the Plastics Strategy to microplastics: the policy framework

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Plastic Strategy



- Regional Seas Conventions, UN, G7, G20
- Focus on most polluted rivers

Focused international actions

Improving reuse and recycling

- All plastic packaging recyclable by 2030
- Fee modulation

Investing on circular solutions

Curbing marine litter

- Research
- New Business Models

- Micro plastics
- Single use plastics
- Marine sources

What's happening?



New waste legislation (2018)

Plastic Strategy (2018)

Single Use Plastics Directive (2019)

Port Reception Facilities Directive (2019)

MSFD

Basel Convention

Category 1 – Waste management options in place

- Increase capture rate/recyclability

Category 2 – Alternatives available

- Stop consumption

Category 3 Alternatives under development

- Limit significantly consumption

Category 4 – No alternatives so far

- Limit damages
- Inform the public



Plastic bottles

- Capture rate 90%
- Caps to be linked with the bottle
- EPR and awareness raising



Cotton buds, stirrers, cutlery, sticks for balloons

- Bans
- 2 year after entry in force



Plastic containers

- Significant reduction
- Similar to plastic bags
- EPR and awareness raising



Sanitary, wet wipes, balloons, Cigarette butts, Balloons, Packets and wrappers

- Marking (3 products)
- EPR and awareness raising



Cosmetics,
detergents, paints,
Oxo plastics

- Towards general ban
- REACH
- SUP Directive



Tyres, Textiles

- Testing harmonization
- Labelling, minimum requirements



Plastic pellets

- Chain certification
- Permitting



Others

- Research
- Urban waste water treatment

REACH restriction

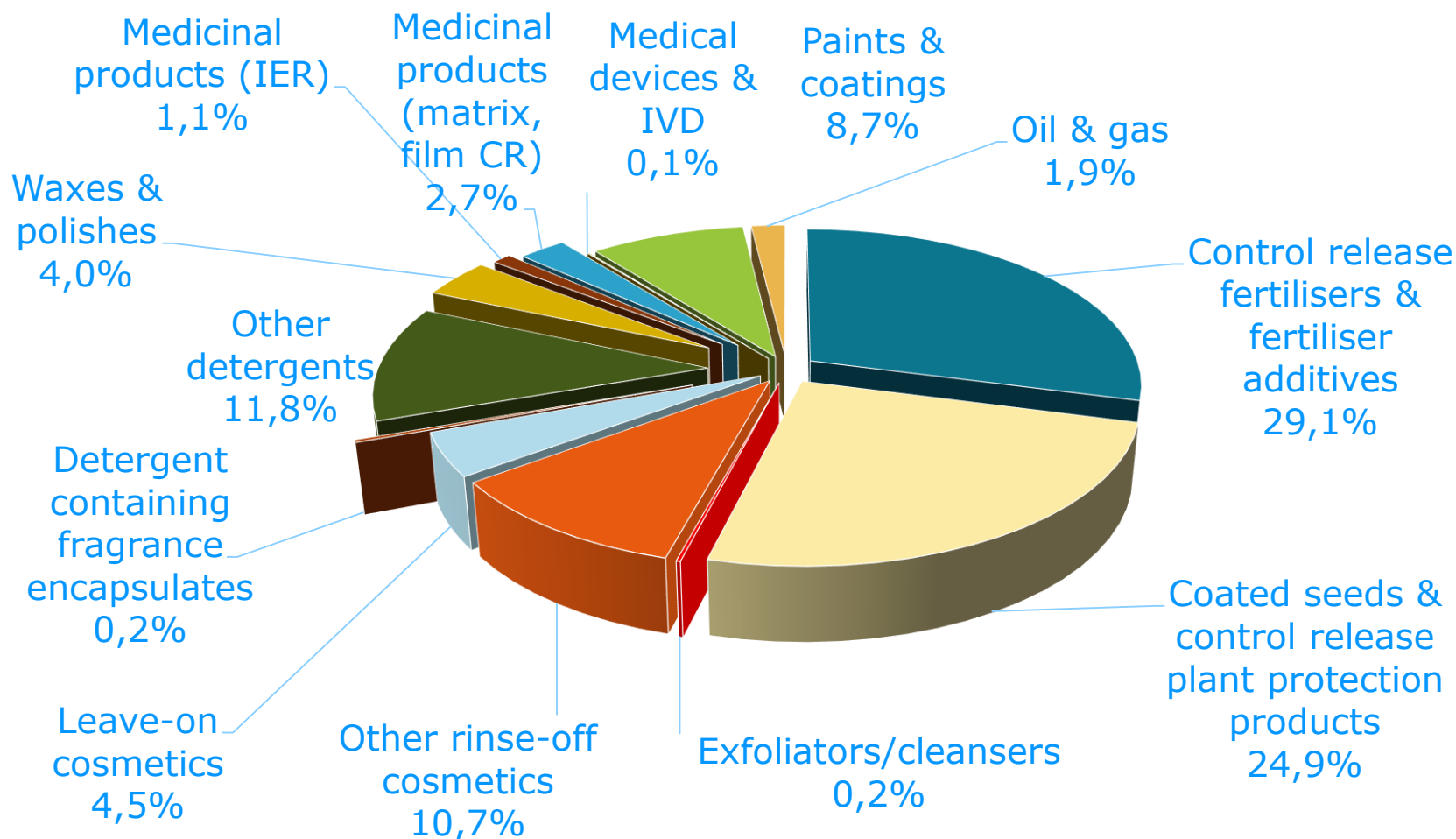
- Addresses unacceptable EU wide risks to human health or the environment from chemicals
- Same requirements apply to the whole EEA from entry into force
- May apply to any substance on its own, in a mixture or in an article \Rightarrow can apply to polymers
- Very flexible tool:
 - \rightarrow Can ban specific uses that pose an unacceptable risk
 - \rightarrow Can derogate specific uses that pose no risk, or with relatively low risks and high socio-economic value

Microplastics definition

microplastic' means a material consisting of solid polymer-containing particles, to which additives or other substances may have been added, and where $\geq 1\%$ w/w of particles have (i) all dimensions **1nm*** $\leq x \leq 5\text{mm}$, or (ii), for fibres, a length of $3\text{nm} \leq x \leq 15\text{mm}$ and length to diameter ratio of >3

* under discussion

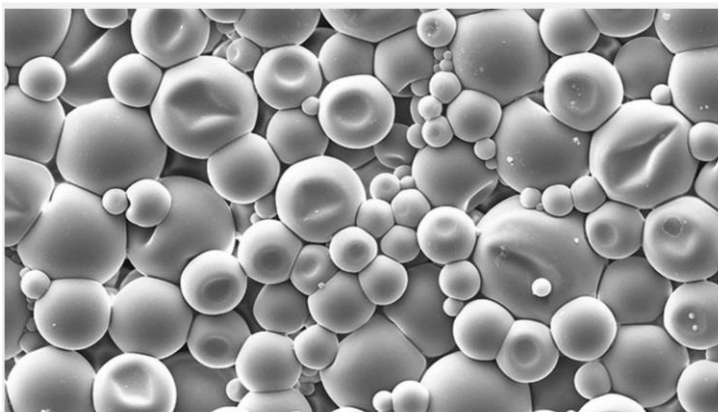
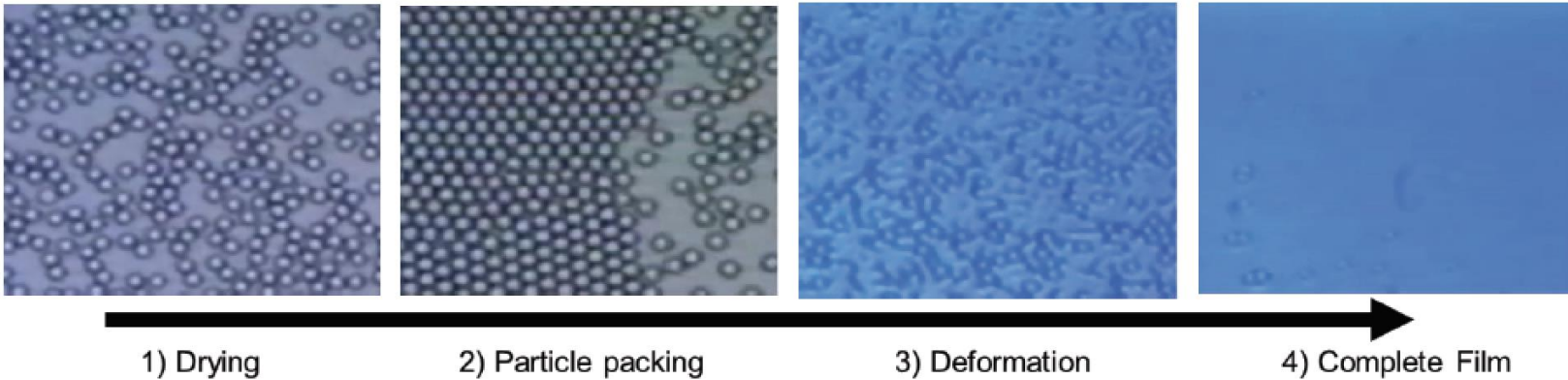
Sectors covered and quantities



Cosmetics



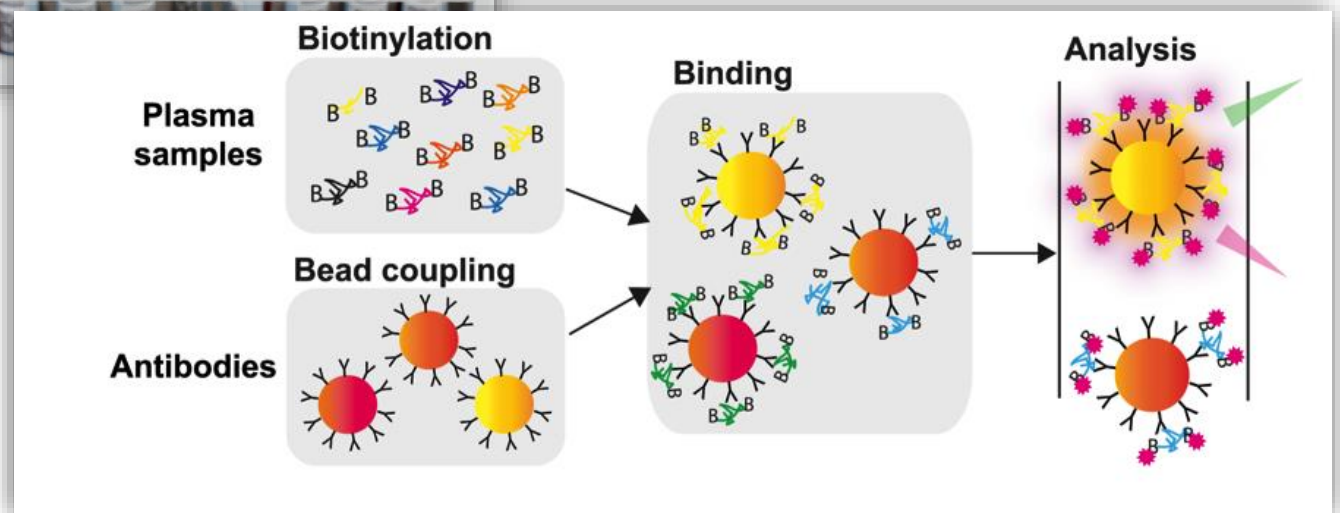
Paints, encapsulation



Microcapsules, which range in size from 5–30 μm , are used to deliver inks, fragrances, and more.

Credit: Encapsys

Medical diagnostics



Risk Assessment

- Extensive literature review
- Widespread evidence of exposure/ingestion
- Evidence of adverse ecotoxicological effects and trophic transfer
- Degradation pathway via 'nanoplastics'; very limited information on the risks
- Inevitable release of microplastics to the environment
- Extreme persistence in the environment leads to an increasing and irreversible environmental stock.
- Considered as 'non-threshold': need to minimise releases
- Concludes that releases of intentionally added microplastics pose a risk that is **not adequately controlled**

Elements of the proposed restriction



Prohibition on 'placing on the market'

uses where releases to the environment are inevitable (e.g. agricultural / cosmetic products)



Mandatory 'labelling'

uses where release can be avoided / minimised; improved instructions for use e.g. paints/coatings



Mandatory downstream user 'reporting' for derogated uses

Tonnage, identify, function, releases

Key messages

- Plastic and microplastics are a policy priority for the Commission
- Plastics Strategy: combination of many targeted actions across the sectors, using all regulatory and non-regulatory tools available
- REACH restriction: unacceptable risk from the presence of intentionally used microplastics → very strong push to all other actions

Key messages

- Scientific research was fundamental for the Plastic strategy and is key for the risk assessment in the restriction on microplastics
- We need the scientific data to support the policy actions, but regulation will not wait to have scientific certainty
- Of interest for next years: biodegradability of polymers



http://ec.europa.eu/environment/waste/plastic_waste.htm

<https://echa.europa.eu/hot-topics/microplastics>



Thank you for your attention!