European Polymer Dispersion and Latex Association

POSITION PAPER

October 2025

EPDLA Position Paper on Polymer Dispersions, Redispersible Polymer Powders, and Synthetic Polymer Microparticles (SPM) in a nutshell

The European Polymer Dispersion and Latex Association (EPDLA), a Cefic Sector Group, promotes the safe manufacture, transport, handling, and use of waterborne polymer dispersions and redispersible polymer powders (RDP) in line with regulatory requirements and industry best practices. EPDLA members uphold Responsible Care® principles and apply precautionary risk management.

Regulatory Context

On 25 September 2023, the European Commission published Regulation (EU) no. 2023/2055, amending Annex XVII of REACH to restrict SPM. This position paper outlines how the regulation applies to polymer dispersions and RDP.

Polymer Dispersions

Polymer dispersions are aqueous mixtures containing high molecular weight polymer droplets synthesized and dispersed in water, used as binders in adhesives, coatings, inks, nonwovens, textiles, RDP and others. This technology has been safely used for over 70 years, significantly reducing workplace solvent exposure and improving indoor air quality.
These dispersions form films when applied: as the water evaporates, the polymer droplets begin to fuse together above their (initial) melting point and form a continuous film.

As detailed in our SPM position paper[1], the temperature at which the first polymer domains begin to melt and fuse together can be measured using the white point temperature (WPT) method), in accordance with the relevant ISO standard[2]. The WPT represents the initial melting point of a polymer dispersed in water.

According to the SPM regulation, a polymer with an initial melting point of 20 °C or less at a standard pressure of 101,3 kPa means such polymer is liquid according to Regulation (EU) no. 2023/2055.

Redispersible Polymer Powders (RDP)

RDP are produced by spray-drying polymer dispersions with a water-soluble polymer adjuvant. The resulting micrometre-sized agglomerates contain polymer droplets encapsulated in a soluble shell.

[1] Polymer dispersions and synthetic polymer microparticles (December 2024)
[2] ISO 2115:1996 - Plastics — Polymer dispersions — Determination of white point temperature and minimum film-forming temperature

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Upon contact with water, the shell dissolves, releasing the original dispersion droplets resulting in a polymer dispersion as defined above.

RDP are primarily used in construction materials to enhance adhesion, flexibility, and water resistance in cementitious and mineral-binder-free systems. They are not intended for plastic manufacturing and thus fall outside the scope of initiatives like Operation Clean Sweep and the proposed Regulation (EU) on plastic pellet loss (COM (2023)645).

SPM Classification and State of Matter

Regulation (EU) n. 2023/2055 defines SPMs as ***solid*** polymers either (a) contained in particles and constituting ≥1% by weight, or (b) forming a continuous surface coating on particles.

If the initial melting point is ≤20°C, the polymer is considered a liquid and thus excluded from the SPM definition. Most polymers in dispersions meet this criterion. For those with initial melting point >20°C, potential derogations may apply depending on the application.

Conclusion

- Film forming polymers in dispersions with initial melting point ≤20 °C are not considered SPM.
- RDP consist of a water-soluble shell and a dispersion polymer core, typically with initial melting point ≤20°C, and are also not considered SPM.

EPDLA will continue to update its position paper as new scientific and regulatory information becomes available.

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About EPDLA
EPDLA (European Polymer Dispersion and Latex Association), a Cefic Sector Group founded in 1991, is dedicated to promote the safe manufacture, transportation, distribution, handling and use of waterborne polymer dispersions, in compliance with regulatory requirements and industry guidelines. EPDLA members are committed to Responsible Care® principles and have implemented risk management according to the precautionary principles.

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