

Different plasticisers for different applications.

Whenever plasticisers need high **elasticity** and **flexibility**, plasticisers make it possible. But they can do **much more**. They also enhance the performance of many other polymers by adding critical properties. There is a wide range of plasticisers, each chosen for specific performance needs. **Over 90%** of all plasticisers sold in Europe are used in flexible PVC, while **the remaining 10%** improve a wide variety of everyday applications.



INKS

Plasticisers make dried inks flexible and prevent cracking or peeling. Some inks, especially those drying by evaporation, become brittle without them.

Benefits:

- Add elasticity
- Increase gloss and finish quality
- Improve freeze resistance
- Reduce heat-related discolouration

PAINTS

Plasticisers improve paint elasticity and adherence, resulting in smoother, crack-resistant coatings.

Triacetates, for example:

- Make paint softer
- Improve elasticity
- Reduce cracking of the final coating

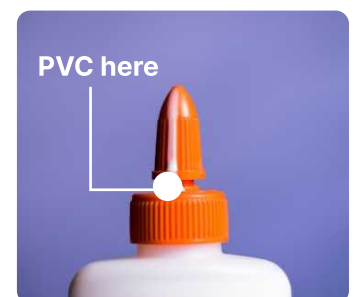
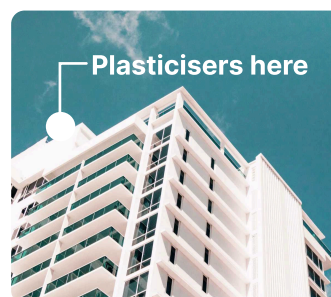
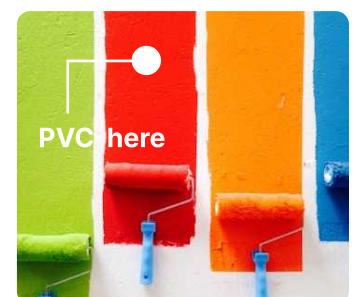
Plasticisers are mainly used in industrial, appliance and automotive coatings.

SEALANTS & ADHESIVES

Plasticisers are key ingredients in many adhesives and sealants. They:

- Extend service and shelf life
- Improve durability and stability
- Reduce production costs
- Optimise performance

Proper compatibility prevents the release of the plasticiser from the product, resulting in the retention of its benefits.





RUBBER

Rubber is valued for stretch, resilience, and waterproof properties. Plasticisers:

- Increase flexibility
 - Improve flow during production
 - Lower processing temperatures
- Common types:
- Phosphates → plasticising efficiency + flame retardant
 - Triacetates → solvent + plasticiser in natural & synthetic rubber



CONCRETE

Plasticisers are widely used to reduce water intake requirements, improve workability, and enhance the final strength of the material. Plasticisers as naphthalene sulphonic acid and derivatives are widely used in concrete.

Phosphates are used in self-consolidating and high-performance concrete. They disperse cement particles so each hydrates efficiently, lowering the water-to-cement ratio and creating a flowing, malleable mix.



PHARMACEUTICALS

Plasticisers are used in coatings, films and as solvents in pharmaceutical preparations. In tablet coatings, they:

- Prevent cracking/peeling
- Protect integrity before use
- Improve longevity and visual appeal
- They also control drug release (faster or sustained).



PERSONAL CARE

Plasticisers are used in cosmetic packaging (flexible bottles and tubes) and in many formulations:

- Triacetates → carriers for flavours & essences
- DEP, DMP, citrates → used in moisturisers, sunscreens, fragrances, nail polish, hair styling
- They influence drying time, viscosity, adhesion, gloss and many performance characteristics.