ENABLING CIRCULARITY!

TEGO® Res 1100

This innovative co-binder ensures faster and better deinking of plastic packaging waste – leading to high-quality recyclates





The industry challenge

The circular economy for plastics is gaining momentum increasing the demand for recyclability. Higher quantities and quality of recycled materials are needed. Ink residues left on printed flexible packaging material after deinking pose a significant challenge for mechanical recycling and adversely impact recyclate quality. Unfortunately, low quality recyclates have limited uses.

To achieve high quality recyclates, it is crucial to fully remove printing inks and coatings from packaging waste. Only with high-quality recyclates does full recycling become possible, thereby enabling true circularity.

Our approach

Evonik Coating Additives has therefore developed an innovative co-binder tailored to solvenborne packaging inks TEGO* Res 1100. It allows simple modification of solventborne ink formulations without having to change existing recycling processes.

Our solution

TEGO® Res 1100 is a methacrylate co-polymer developed by Evonik Coating Additives. This free-flowing, non dusting powder can easily be incorporated into solventborne ink formulations and is compatible with various binders and solvents, including alcohols and esters.

Broad usability is ensured!





Click or scan the QR-code for more information!

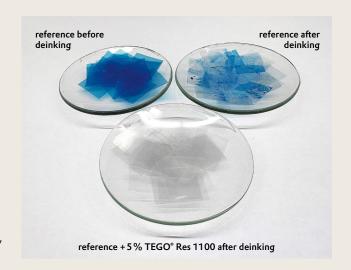


Improved deinking

TEGO® Res 1100 sets new standards: It significantly increases the deinking speed and efficiency of solvent borne inks on PE, PP, and PET films, with only caustic soda at low temperatures. Deinking times are reduced up to 9 times, recyclate quality significantly increased!

TEGO® Res 1100 is also effective when testing deinking according to DIN SPEC 19496, using caustic soda combined with surfactant.

Extensive evaluations of TEGO® Res 1100 across various ink formulations have revealed no adverse effects on ink properties such as adhesion, heat seal resistance, viscosity, or wet crinkle resistance.



Blue NC/PU ink deinked after (min.) 2% NaOH, 40°C 35 30 25 10 Blank 1 3% 5% 10% TEGO* TEGO* TEGO* Res 1100 Res 1100 Res 1100

BENEFITS AT A GLANCE

- Enables deinking of flexible packaging without a major technology change
- · Allows for deinking at low temperatures
- Accelerates deinking and improves recyclate quality
- Broad solubility and compatibility, ink properties remain unchanged
- · Broad food contact compliance

More information and test results ...



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