

Technical Data Sheet – Saika P8-gL

Saika P8-gL – Processing Aid for PE & PP Re-granulation, Pipe and Film

Product description

Saika P8-gL is a liquid processing aid for polyethylene and polypropylene re-granulation and extrusion. It is designed to stabilize melt flow, reduce friction and support high, consistent throughput when processing 100 % recycled PE blends, recycled films and virgin or recycled-rich compounds for pipes, corrugated pipes, profiles and blown films.

Key benefits & applications

Improves melt flow and conveying in single-screw and twin-screw extruders, helping to reduce back-pressure build-up and pressure peaks, especially when fine or multi-layer screen packs are used.

- Enables higher and more stable output (kg/min of granules, m/min of pipes and profiles) in re-granulation of 100 % recycled HD/LL/LD PE, recycled film and in extrusion of virgin or recycled-rich PE/PP pipes, corrugated pipes and profiles, while maintaining product quality.
- Contributes to smoother pellets and more uniform strands, with fewer visible flow marks and reduced disturbance from small solid impurities in recycled feedstocks.
- In blown-film and film re-granulation lines, helps to release volatiles and residual gases from degraded or contaminated films, reducing bubble instabilities and visible bubbles or pinholes in regenerated film and improving surface appearance

Typical properties

Item	Value / Range
Physical form	Clear to slightly hazy liquid
Color	Pale yellow
Density (20 °C)	Approx. 0.85–0.95 g/cm ³
Viscosity (20 °C)	Approx. 10–60 mPa·s
Flash point (closed cup)	Typically > 65 °C
Water solubility	Practically insoluble
Packaging	1 L, 5 L, 20 L containers
Shelf life (unopened)	12-18 months (15–30 °C, cool & dark)

(values aligned with P8-series SDS; exact figures to be specified in COA)

Recommended dosage

- Typical dosage range: **0.04–0.08 wt%** (400–800 g per 1,000 kg of PE/PP).
- Higher dosages are technically possible; the optimum level should be selected based on the desired productivity gain and overall economic balance of the formulation.



Use instructions

- Saika P8-gL can be dosed **directly into large mixers** together with PE/PP pellets or flakes. Mix until the liquid is evenly distributed and pellet surfaces appear dry.
- For small trial batches (e.g. 100 kg), a **pre-blend** can be used: mix the required amount of P8-gL with 5–10 kg of dry resin for a few minutes, then add this pre-blend to the remaining material and mix until uniform.
- Process the treated material on the existing re-granulation, pipe, profile or blown-film lines within the usual melt-temperature settings for the respective PE/PP grades; no special temperature adjustment is required solely due to P8-gL

Process and quality monitoring

- Monitor head and screen-pack pressure, extruder load (current/torque) and output (kg/min or m/min) before and after P8-gL addition.
- Check pellet and strand surfaces for uniform appearance and absence of unusual flow marks, gels or hard specks.
- In blown-film applications, observe bubble stability and reduction of gas bubbles or pinholes versus the reference run without P8-gL.
- Saika P8-gL is supplied as a liquid processing aid for industrial PE/PP processing; optimum dosage and operating conditions should be confirmed by short production trials on each line and formulation

Storage and handling

- Store in tightly closed original containers at **15–30 °C**, in a cool, dry, well-ventilated place away from heat and ignition sources.
- Mix gently before use if stored for an extended period, and handle in accordance with the P8-series SDS and local safety regulations, using appropriate personal protective equipment.

Safety

Saika P8-gL is a low-hazard industrial processing aid. It should be handled in accordance with the P8-series Safety Data Sheet (SDS) and local regulations, using appropriate personal protective equipment as part of normal good industrial practice.

