

## Technical Data Sheet – Saika P8-g

### Saika P8-g – Green Processing Aid & Homogenizer for Recycled PE

#### Product description

Saika P8-g is a liquid **processing aid and homogenizer** for mixed and recycled HD/LL/LD PE, designed to stabilize melt behavior, improve internal homogeneity and deliver smoother, more uniform products in extrusion and re-granulation.

#### Key benefits & applications

- Stabilizes melt flow and reduces flow disturbances in mixed and recycled PE extrusion, helping to achieve more consistent processing conditions.
- Homogenizes heterogeneous HD/LL/LD blends, improving overall melt behavior and compound integrity when using non-prime and recycled materials.
- Delivers smoother surfaces and more consistent appearance in pipes, sheets and profiles produced from recycled-rich or mixed PE compounds.
- Enables higher and more stable output at a given energy level by improving conveying and melt stability in re-granulation and extrusion of recycled PE, often at the same or lower energy input.

#### Typical applications

- Re-granulation and compounding of mixed and recycled HD/LL/LD PE.
- Extrusion of corrugated and other non-pressure pipes, sheets and technical profiles made from recycled-rich or mixed PE compounds. Films, virgin pressure pipes and PP applications are not the target for this grade.

#### 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 <sup>3</sup>
Viscosity (20 °C)	Approx. 10–60 mPa·s
Typical melt-temperature window*	180–210 °C
Flash point (closed cup)	Typically > 65 °C
Water solubility	Practically insoluble
Packaging	1 L, 5 L, 20 L containers
Shelf life (unopened)	6-12 months (15–30 °C, cool & dark)

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

\* Typical PE extrusion melt-temperature range for recycled PE compounds; not a property of Saika P8-g itself.



## Recommended dosage

The typical dosage range is **600–800 g of Saika P8-g per 1,000 kg of PE compound**, adjusted according to recycled content, line conditions and the desired melt behavior and surface quality. Higher or lower dosages can be selected by the processor based on observed effects on line pressure, melt stability and product appearance.

## Use instructions

- Saika P8-g can be dosed **directly into large mixers** together with rPE pellets or flakes. Mix until the liquid is evenly distributed and pellet surfaces appear dry.
- Process the treated material on existing re-granulation, pipe, sheet or profile extrusion lines within the usual melt-temperature settings used for the respective recycled PE grades; no special temperature adjustment is required solely due to the use of Saika P8-g.

## 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-g addition.
- In recycled-rich PE compounds, P8-g generally improves surface uniformity and reduces visible surface defects versus untreated reference material.
- Saika P8-g is supplied as a liquid processing aid for industrial processing of mixed and recycled PE; optimum dosage and operating conditions should be confirmed by short production runs on each line and formulation.

## Storage and handling

- Store Saika P8-g in tightly closed original containers at 5–25 °C, in a cool, dry, well-ventilated place away from heat and ignition sources and from direct sunlight.
- Keep containers closed when not in use and mix gently before use if stored for an extended period.
- Handle in accordance with the P8-series Safety Data Sheet (SDS) and applicable local regulations, using appropriate personal protective equipment as part of normal good industrial practice.

## Safety

Saika P8-g 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.

