

# Additives for Recycling

The discussions about the circular economy of polymers have shown that recycling is one of the most important topics in the polymer industry.

Baerlocher is dedicated to offering services which help converters of recycled material convert their plastic waste into new end products by advising additive solutions to ease their processes. At the same time the recycled material can reach a higher quality level by adding Baerlocher additives.

Additives play a determining factor in processing properties and product quality. Baerlocher one-pack solutions form a proven concept to enable the recycling industry to fulfil the industrial standards of the end applications, for instance film, pipe, and even automotive applications.

Baerlocher additive solutions can be combined with various other additives e.g. UV stabilizers, metal deactivators and others.

Increasing the value of recyclates and expanding the number of applications where recyclates can be used is the recipe for growth that recycling companies are looking for. However, plastics made from recyclates need to meet the requirements of converters. Baerlocher additive packages help fulfil these requirements.

## Advantages

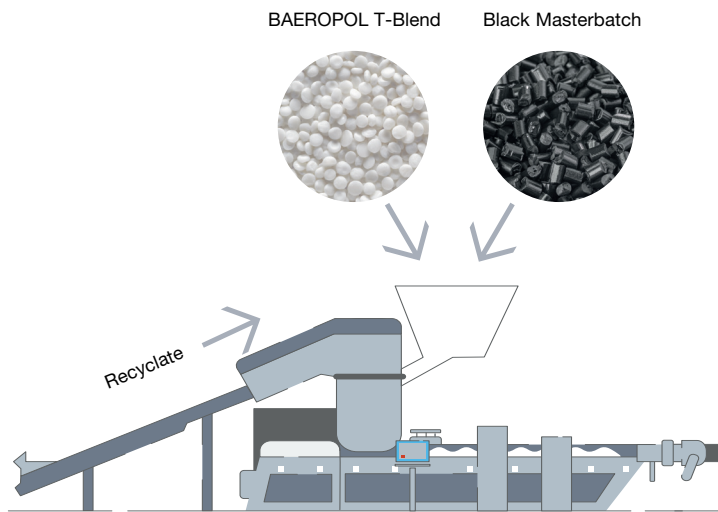
- Dust free and easy to dose
- 100 % active substance
- Stabilization of melt flow
- Color retention for translucent film
- Reduction of gels and bubble breaks
- Consistent shot size to minimize rejected parts



## Simple Handling

Standardized stabilizer one-packs known as BAEROPOL T-Blends offer solutions for many recycling challenges. The BAEROPOL T-Blend product range is delivered in low or no dust product forms, which ensure easy handling, dosing and dry blending.

## Easy Dosing of BAEROPOL T-Blend via Side Feeder



## Bubble Breakages and Pin Holes

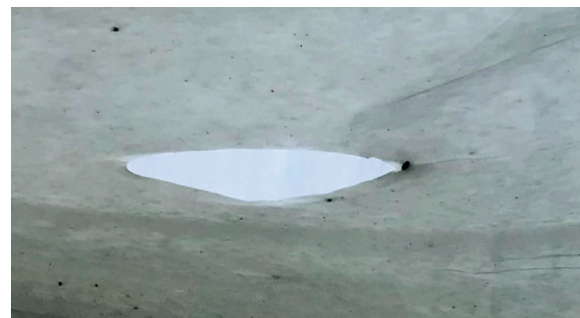
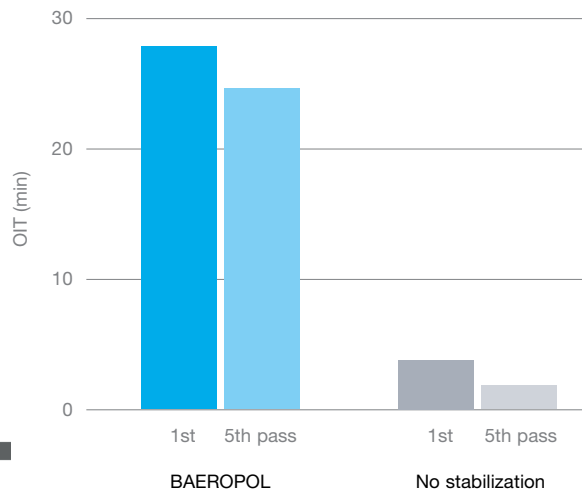
Contaminants from insufficient melt filtering or gels of degraded polyethylene can create pin holes, which can lead to bubble breakages. Introduction of a suitable BAEROPOL T-Blend during the first stage of reprocessing will reduce the number of gels and ensure a more stable production and fewer rejects of finished product.

## Re-Stabilization

OIT (Oxygen Induction Time) is a typical way to measure the relative amount of stabilization introduced by an additive. The better OIT the better melt processing stability and long-term heat aging performance will be.

## Enhancing Oxidation Induction Time by Restabilization

OIT value by multipass extrusion of PP recyclate



Typical pin hole in recycled film

## Baerlocher Products

Product	Description	Typical Applications	Polymers
BAEROPOL	Blends of additives as longterm AO, processing aids, UV Stabilizer etc.	Recyclates for various pipe, film, and automotive production	PP, PE
BAEROLUB	Blends of additives e.g. waxes, metal soaps	Typical for reduction of friction while extrusion or as a release agent for injection molding processes	PP, PE

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