

# CERTIFICATE

## Recyclability of Packaging Material

**TOPAS Advanced Polymers GmbH**  
**Am Prime Parc 9**  
**65479 Raunheim | Germany**

The company receives the certification of recyclability for the following packaging material:

### Designation

#### Cyclic Olefin Copolymers (COC)

- Polymers with norbornene contents  $\leq 50$  mol% and ethylene contents  $\geq 50$  mol%
- As blend component or layer in flexible PE-based packaging applications

### Test result

Assessment via path: Path 1: Plastic films / LDPE

Recyclate (final product): LDPE regranulate

#### Test standard:

- Requirements and assessment catalogue of the cyclos-HTP Institute for EU-wide certification

Within the certification process, conformity with the following standards was also checked:

- DIN EN 13430 with regard to material recyclability in the post-use phase; also integrated

The following reference processes, materials and applications are taken into consideration within the certification process:

- Detection as flexible PE packaging in state-of-the-art sorting plants
- Recyclate use for injection moulding and blown film applications
- Commercial PCR-based LDPE recyclate as reference
- Test program based on APR test protocol FILMS1-BG01 with the use of PCR-based LDPE recyclate as reference

According to the CHI standard the plastic material is a valuable material in the tested application and can be considered as:

## Fully Recyclable for PE Film Recycling

This certificate (No. 2171-2020-001719-W3) is valid until **30/09/2024** (1 year upon issue).

This certificate will lose validity in case of qualitative or quantitative changes of material components.

Aachen, dated 11/09/2023

  
**Dr. Roland Bothor**  
Publicly appointed and sworn expert for packaging disposal  
Competent authority:  
Chamber of Industry and Commerce, Aachen

The detailed results are documented in the corresponding test report (No. 2171-002-2020).



**CHI | cyclos-HTP Institute**

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# ANNEX

## to Certificate No. 2171-2020-001719-W3

### Document history

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**2171-2020-001719 Certificate TOPAS COC for PE pck (date: 28/08/2020)**

- Original certificate document with test report No. 2171-002-2020

**2171-2020-001719-W1 Certificate TOPAS COC for PE pck (date: 28/07/2021)**

- Re-certification for one further year without updated or revised test report No. 2171-002-2020

**2171-2020-001719-W2 Certificate TOPAS COC for PE pck (date: 26/07/2022)**

- Re-certification for one further year without updated or revised test report No. 2171-002-2020

**2171-2020-001719-W3 Certificate TOPAS COC for PE pck (date: 11/09/2023)**

- Re-certification for one further year without updated or revised test report No. 2171-002-2020
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