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 ≤ 50 mol% and ethylene contents ≥ 50 mol%
- as blend component or layer in PE-based packaging applications

Test result

Assessment via path: Path 1: Plastic films / LDPE Recyclate (final product): LDPE regranulate

Test standard / scope of application:

- Requirements and assessment catalogue of the institute cyclos-HTP for EU-wide certification (state 14/09/2021) / Scope of validity according to nation states, see chapter 1
- ☑ 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

e- und Handels

Dr.-Ing. land Bothor

- 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

Collection and recycling structures: AT, BE, DE, DK, ES, FR, IT, NL, NO, PT, SI

This certificate (No. 2171-2020-001719-W2) is valid until the 31/08/2023 (1 year upon issue) for the countries listed in brackets above; for the countries shown in italics, the existence of a recycling infrastructure cannot be assumed as predominant. This certificate will lose validity in case of qualitative or quantitative changes of packaging components.

Aachen, dated 26/07/2022

Dr. Roland Bothor Publicly appointed and swarn expert for the JHK

packaging waste disposal Wich bestellt und Competent authority: IHK Aachen

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

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