

REGULATORY COMPLIANCE CERTIFICATE

We, Polinas Plastik Sanayii ve Ticareti A.S., hereby declare that the OPP films of the types:

POLIKAP PVOH COATED FILMS B029, B040, B046, B050, B051, 7B040, 7B046, 7B050

comply with the following legislations,

- A. Commission Regulation 10/2011 and its successive amendments up to and including 2019/37
- B. Regulation 1935/2004/EC
- C. Regulation 2023/2006/EC, American 21 CFR 174.5 (GMP for food contact materials and articles intended to come into contact with food)
- D. FDA Section 21 CFR Ch. 175.300 and 176.170
- E. Türk Gıda Kodeksi Gıda İle Temas Eden Plastik Madde Ve Malzemeler Tebliği (Tebliğ No: 2013/34 – 35 - 2016/10 ve 8 Şubat 2019 tarihli 30680 Sayılı Resmi Gazete)

OVERALL MIGRATION LIMITS

We confirm that for the production of our films listed, we use only monomers, starting substances and additives listed in the Union List of Authorized Substances of 10/2011 and its successive amendments up to and including 2019/37.

All polymers and additives in the composition of above mentioned films appear in the positive list of products accepted for the fabrication of packaging materials intended for food contact, as published by the Food and Drug Administration (USA) FDA 21 CFR 177.1520(c)1.1a (Polyolefins)

Films were tested according to latest directives (10/2011) in the following simulants to obtain global migration values for all food types.

EC 10/2011

Olive Oil	Simulant D2	10 days @ 40 °C
3% acetic acid solution	Simulant B	10 days @ 40 °C
50% Ethyl alcohol solution	Simulant D1	10 days @ 40 °C

SPECIFIC MIGRATION LIMITS

During the production of our BOPP films, we use following additives which are included in the Union List of Authorized Monomers and other starting substances in Annex I of EC Directive 10/2011 and its successive amendments up to and including 2019/37. Theoretical calculation method was used according to latest EC directive of 10/2011 in order to find the level of specific migrations for the compounds below.

EC 10/2011

10% Ethyl alcohol solution	Simulant A	10 days @ 60 °C
3% acetic acid solution	Simulant B	10 days @ 60 °C
Olive Oil	Simulant D2	10 days @ 60 °C

PM Ref Number	SML
74880	0,3 mg/kg

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74640		1,5 mg/kg
39090	(only for B040,B046)	1,2 mg/kg

Since PVOH coated films were mostly used for dry food packaging we also performed OML test with Tenax (Simulant E). According to test results we verified that there is no non-volatile substance with more than 6 mg/kg migration limit. (test result may be shared upon request)

DUAL USE ADDITIVES :

Our films may contain following food additives

Chemical Name	Cas or PM Ref Number	E Number
Mono/diglycerides of fatty acids	PM/Ref: 56486	E471
Synthetic silica	CAS no 7631-86-9	E551
Calcium Carbonate (only for B040, B046)	CAS no 471-34-1	E170
Polyvinyl Alcohol	CAS no 9002-89-5	E1203

HEAVY METALS :

The raw materials used in the production of said coated OPP films, namely: PP homopolymers, PP copolymers, PP terpolymers, masterbatches and coatings, based on the above mentioned resins do not contain heavy metals such as cadmium, hexavalent chromium, lead, antimony, nickel, tin, arsenic, PBB, PBDE and mercury, as declared by the suppliers of the above mentioned raw materials.

Neither the said heavy metals nor their compounds are intentionally added during the production of the said coated OPP films, nor they are used, directly or indirectly, in the production process itself.

Any incidental amount of heavy metals contained does not exceed 100 ppm (by weight). For these reasons, we hereby declare that the said coated OPP films comply with the following regulations:

a. USA CONEG REGULATION

b. 2009/48/EC (Safety of toys)

c. Directive 94/62/EC on packaging and packaging waste is amended by Directive 2004/12/EC and 2018/852.

d. ROHS Regulation (2011/65/EC)

e. WEEE Regulation (2002/96/EC)

SPECIFIC MIGRATION OF HEAVY METALS :

Specific migration analysis of Barium, Cobalt, Copper, Iron, Lithium, Manganese and Zinc were analyzed according to Annex II of EC Directive 10/2011. Tests were performed in the simulant of 3% acetic acid solution (Simulant B, 10 days @ 60 °C+4 hours @ 100 °C).

Heavy Metals	SML (food or food simulant)
Barium	1,0 mg/kg
Cobalt	0,05 mg/kg
Copper	5,0 mg/kg
Iron	48,0 mg/kg
Lithium	0,6 mg/kg



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Manganese	0,6 mg/kg
Zinc	5,0 mg/kg
Aluminum	1,0 mg/kg

GMO – DIOXINE – RESTRICTIONS-ALLERGENS – RECYCLED RAW MATERIAL USAGE:

According to the information received from our suppliers the additives and PP homopolymers, terpolymers and coating materials used for the production of said films do not contain any genetically modified organisms (GMO)

2003/11/EC (restrictions on the marketing and use of certain dangerous substances and preparations) : please refer absence list given below.

1895/2005 EC (restriction of use of certain epoxy derivatives in materials and articles intended to come into contact with food) : please refer absence list given below.

252/2012 EC (related with dioxine and dioxine related PCB's in the food chain) is not applicable to our products.

Our films do not contain any allergic substances and we hereby confirm that our film complies with **2003/89 EC**.

Polinas films are produced only from virgin resin and do not contain post-consumer recycled components, and no obligation exists under the **282/2008/EC**

RECYCLING :

BOPP films can be recycled.

PHTHALATES:

We hereby state that no phthalates of whichever chemical form are intentionally added as modifiers, plasticizers additives, or processing aids to BOPP films produced by Polinas.

In fact, Polypropylene films and BOPP in particular, do not need phthalates as modifier, plasticizer, additive, or processing aid. Phthalates in general, are peculiar modifiers, plasticizers, additives, or processing aids of plastics materials totally different from polypropylene. Even in the case of such (different) plastics materials, the food contact legislation allows anyhow the use of certain phthalates in food contact, stating in certain cases SML for their use.

During the production of catalysts for PP, Dibutyl phthalate (DBP) Diisobutyl phthalate (DIBP) or Bis(2-ethylhexyl) phthalate (DEHP) are used to improve the efficiency of the catalyst and those are essential for the control of isotacticity of polymer and therefore has major impact on mechanical properties of the final product

If completely surviving the polymerization process, the used phthalates could theoretically be present in concentrations of about 1 mg/kg in the final pellets. However, test results have shown phthalate values not exceeding 0,15 mg/kg PP and often even below the threshold of the analytical method of 0,01 mg//kg PP.

The potential residual traces of phthalates in polypropylenes are decades below the limits defined by REACH (0,1 wt%), thus no commercial polypropylene is subject to any restriction or ban in that respect.



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The sunset date for these phthalates in 2015 does not prohibit the import or use of any products containing them in concentrations below 0.1 wt%.

As a reference, one of our film has been tested for DBP and DEHP in simulants A, B and D2 at 60C, 10 days. Results for those phthalates shown that it is well below the measureable limit of 0,1 mg/kg.

The following phthalates are absent in our film.

Di(2-ethylhexyl) phthalate, n-butyl benzyl phthalate Octyl & Nonyl phthalates, Buthyl Benzyl Phthalate, Diisodecylphthalate, Diisononylphthalate, Diisooctylphthalate, Dioctyl phthalate,

Chemical List of Proposition 65:

We certify that during the production of our films, we do not use or intentionally incorporate into them, any of the chemicals as restricted by Chemical Lists of Proposition 65 of the State of California and subsequent amendments. Complete list can be downloaded from;

<https://oehha.ca.gov/media/downloads/proposition-65//p65list112318.pdf>

NIAS :

Non-Intentionally added substances (NIAS) are under ongoing risk assessment using recognized method.

REACH :

Under the REACH regulation, all the products of POLINAS (plastics films) are manufactured items obtained from polymers, and so exempted from REACH registration. (including February 16th update)

POLINAS have taken all the necessary steps to ensure that the chemical components from which POLINAS' products are obtained fulfill the obligation of the REACH registration, with specific requests of declarations from POLINAS' raw material suppliers.

Raw material suppliers to POLINAS are:

- Producers of Polymers
- Producers of Polymer Masterbatches (admixtures of Polymers and other components)

Polymers are exempted from the provisions of registration of Title II of REACH (Article 2(9)).

Polymer Masterbatches are considered, in regulatory terms, "preparations", and are exempted from the provisions of registration.

Nevertheless, the obligation of registration of the individual chemical substances used by the raw material suppliers to POLINAS (Producers of Polymers and Producers of Polymer Masterbatches) goes down in the supply chain to the obliged parties that supply the base chemicals and monomers (namely:propylene monomer) to the Producers of Polymers and Producers of Polymer Masterbatches that are the present suppliers to POLINAS.



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SVHC :

Our BOPP, BOPET, CPP, Coated and Barrier Films do not contain in their composition more than 0,1% (w/w) concentration of the substances listed in SVHC (substances very high concern), which is updated regularly by ECHA.