

## Declaration of conformity according to Article 15 of Regulation (EU) No. 10/2011

This declaration of conformity applies to all products manufactured by Groku Kunststoffe GmbH.

### Product group

Plastic bucket including lid, all sizes

We confirm that the articles listed above meet the requirements of Regulation (EU) No. 10/2011, Regulation (EC) No. 1935/2004 (in particular Article 3, Article 11 paragraph 5, Article 15 and Article 17) and the Regulation (EC) No. 2023/2006 in their currently valid versions. We have the identity of the suppliers and the raw materials and can be named to authorities on request. Specific information on used substances with restrictions: Based on the information provided by our suppliers, the plastic material of the items listed above may contain the following substances with restrictions. Compliance with the specific migration limit values (SML) and, where applicable, the permissible residual content in the material (QM) is confirmed in the conformity assessments we carry out by us and in the information provided by our suppliers. a) Base material substance CAS-Nr./ REF-Nr. SML [mg/kg] 9,9-bis (methoxymethyl) fluorenes 182121-12-6 0,05 2,5-bis (5-tert-butyl-2-benzoxazolyl) thiophenes 7128-64-5 0,6 N,N-bis (2-hydroxyethyl) alkyl (C8-C18) amines 39090 1,2 Lithium benzoate 37600 0,6(than lithium) 2,2'-methylenebis (4,6-di-tert-butylphenyl) lithium phosphate 85209-93-4 5

#### a) Base material

substance	CAS-Nr./ REF-Nr.	SML [mg/kg]
9,9-bis (methoxymethyl) fluorenes	182121-12-6	0,05
2,5-bis (5-tert-butyl-2-benzoxazolyl) thiophenes	7128-64-5	0,6
N,N-bis (2-hydroxyethyl) alkyl (C8-C18) amines	39090	1,2
Lithium benzoate	37600	0,6(than lithium)
2,2'-methylenebis (4,6-di-tert-butylphenyl) lithium phosphate	85209-93-4	5

#### b) Colored material

substance	CAS-Nr./ REF-Nr.	SML [mg/kg]
Irganox 1076	2082-79-3	6
Zinc stearate	557-05-1	5 (than zinc)
n-butyl acrylate	141-32-2	6
Zinksulfid	96320	5 (than zinc)
Triethanolamine	102-71-6	0,05
Copper	--	5
Barium	--	1
9,9-bis (methoxymethyl) fluorenes	182121-12-6	0,05
2,5-bis (5-tert-butyl-2-benzoxazolyl)thiophenes	7128-64-5	0,6

### Notes on NIAS (non-intentionally added substances):

As part of the conformity assessment of the items listed above, representative tests for non-intentionally added substances (NIAS) were carried out using GC-MS screenings, among other things. Corresponding documents are available to us and can be presented on request.

### Specific information "dual-use additives":

Based on the information provided by our suppliers, the plastic material of the items listed above may contain the following substances, which can be used both as additives in plastics and as additives for food itself ("dual-use additives"). We point out that other dual-use additives may be included, about which we have not been informed.

#### a) Base material

substance	E-Nr.
Glycerol monostearate 90%	E471
Hydrated Magnesium Silicates	E553b
Vegetal Calcium Stearate	E470a
Polyglycerols esters of fatty acids	E475

#### b) Colored material

substance	E-Nr.
Calcium Carbonate	E170
Titanium Dioxide	E171
Vegetal Calcium Stearate	E470a

Specific information on the intended use of the articles listed above:

Types of food that can come into contact with the article as intended	Contact conditions for the intended use of the article	Surface-to-volume ratio in the conformity test
All kinds of food	Any long-term storage at room temperature or below, including packaging by means of hot filling and / or heating to a temperature T, where $70^{\circ}\text{C} \leq T \leq 100^{\circ}\text{C}$ , for a maximum duration of $t = 120/2^{\wedge} ((T-70) / 10)$ Minutes.	6 dm <sup>2</sup> / 1000 ml *

\* Depending on the version, other conditions may also have been checked. Please take this from your respective specification

#### Use of printing inks:

If printing inks are applied to the side of the article facing away from the food, according to the information provided by the suppliers, these are UV printing inks which have been manufactured in accordance with EuPIA "Good Manufacturing Practices (GMP) - Printing inks for food contact materials". Their conformity with regard to the influence on food has been confirmed both by our supplier and by us through separate conformity assessments.

#### Use of in-mold labels (IML):

If IMLs are introduced on the side of the article facing away from the food, their conformity with regard to the influencing of food has been confirmed by our supplier as well as by separate conformity assessments by us. The starting products used (plastic films, printing inks, topcoats) were selected in accordance with Regulation (EC) No. 1935/2004 and the relevant requirements applicable to the various materials.

#### Use of food allergens and genetically modified organisms (GMO):

No substances that are considered food allergens or that come from genetically modified organisms are used in our production. According to information from our suppliers, there are no substances in our raw materials that are considered to be food allergens or come from genetically modified organisms. In addition, it can be assumed that protein-based allergens will be destroyed when our products are processed, which take place at temperatures above 200 ° C. Please note that routine laboratory tests on our products cannot take place in this regard.

#### FAQ on the declaration of conformity

##### Chlorinated plastics

Chlorinated plastics such as PVC are particularly important as foils in packaging. In general, no regulation rules out this use for food packaging. Since we only confirm the use of "polymer with ethene" as PP and PE in our declaration of conformity, we exclude the use of chlorinated plastics in our production of food packaging.

##### Phthalates

Phthalates are esters of phthalic acid (= 1,2-benzene dicarboxylic acid) with various alcohols, mostly alkanols. The salts of phthalic acid are also called phthalates. We do not use phthalates as known ingredients. The guideline value of <0.1 g/100g is complied with and can be verified with test report no./Report no. CAL18-1644467-1/hve according to the type and scope of the examination carried out.

##### Nonylphenol

Nonylphenol is not known to be used as a substance in our materials. We assume that the guide value of max. 100 mg / kg is complied with for our materials, but this indicates that the test for the content of this substance as part of our previous, risk-based conformity assessment has not taken place.

##### DMF / dimethylformamide

Dimethylformamide is also not used as intended for our materials. However, we would like to point out that the test for the content of this substance as part of our previous, risk-based conformity assessment has not taken place.

##### PAK

Representatives of this group of substances are not used for our materials as intended. Qualities that are used in direct contact with food usually comply with the guideline values for direct food contact, which is why we assume that the guideline values can be met by our materials without any problems. Here, too, we would like to point out that the specific test for the content of these substances as part of our conformity assessments did not take place.

##### Halogens, PVC, plasticizers

You will find our corresponding conformity in the attachment. Our products do not contain PVC, Halogens and plasticizers. Code of Federal Regulations – Title 21 - §177.1520 "Olefin Polymers" We hereby confirm that we have Produce compliant. At the same time, we explain to you that all materials of the components in contact with the media meet the requirements of the Food and Drug Administration (FDA) according to the information provided by the suppliers. Due to the conformity with this regulation, the materials are suitable for use in the application area in the respective regulation, provided that they are used as intended.

### Undesirable substances

The use of the following substances is excluded at all stages of our manufacturing process and they are not a constitutional component:

- Phthalates / Phthalates
- bisphenol A
- bisphenol AF
- bisphenol B
- bisphenol E
- bisphenol F
- bisphenol S
- Fabrics with a nanostructure
- benzene
- toluene
- PVC, PVDC
- xylol / xylene
- ethylene benzene

### SML substances

The contained SML substances are within the limit values and the overall migration is within the limit values. See pages 1 and 2 (point A and B) in this conformity.

### Additional requirements for UV printing ink system / radical curing system

Radically curing inks currently have the largest market share. Cationic colors are more of an exception, especially in the area of screen printing. In the following, the various mechanisms with their advantages and disadvantages will be compared.

#### Radically curing colors

In this class, unsaturated resins with reactive groups are used which lead to a crosslinking reaction via free radicals. In general, these are acrylated resins or monomers with terminal acrylic acid groups (acrylic acid esters). In addition to the acrylates, other compounds with reactive double bonds, e.g. unsaturated polyester resins and vinylic monomers such as e.g. Styrene can be crosslinked via this mechanism. When exposed to UV light, the photoinitiators spontaneously break down into free radicals and trigger a (chain) reaction for the polymerization. These radicals react with the double bonds of the resins or the monomers, so that further, growing (macro) radicals arise. Further resin or monomer molecules can in turn attach to these. A rapidly growing chain is created, which is finally stopped by a termination reaction. A three-dimensionally networked, insoluble and solid structure of macromolecules is created. This happens in seconds or fractions of a second, so that immediately after hardening a resilient Film is made. The oxygen in the air interferes with this reaction. The radicals required for the polymerization react preferentially with oxygen on the surface. This significantly reduces the efficiency. The person skilled in the art speaks here of an oxygen inhibition. Some UV dryers therefore work under inert gas. This allows the belt speed to be increased considerably or the proportion of (expensive) photo initiator in the color to be reduced significantly. Inert gas systems are rare in the screen printing sector, but are occasionally used, for example in the automotive sector for textured paints. A volume contraction takes place during the polymerization. This effect, also known as shrinkage, has negative effects throughout. On the one hand, this makes it more difficult to adhere to difficult substrates; on the other hand, tensions in the coating material may lead to a warping of the surface, which is particularly important in the case of thin-layer materials such as e.g. Labels lead to the well-known "edge rolling". Depending on the formulation, the shrinkage during curing is typically between 5% and 15%. Radically curing UV inks that have not fully reacted usually have a more or less high irritant potential and usually have a sensitizing effect. The handling of UV inks therefore requires suitable precautionary measures. In contrast, hardened colors no longer pose a danger.

Med venlig hilsen  
Dansk Transport Emballage A/S

Michael Gabelgaard Minke  
QM

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