

PRODUCTFICHE – FICHE PRODUIT - SPECIFICATION PRODUCT

1. Algemene informatie – Information général – General information

VORIG ARTIKELNR. ACE / N° Art. ACE précédent / Previous Ref. No. ACE	
ARTIKELNR. ACE / N° Art. ACE / Ref. ACE	SP02152
OMSCHRIJVING / Description / Description	Deksel PET transp. 95mm voor kraft saladepotjes 95mm Couvercle PET transp. 95mm pour pot rond kraft 95mm
DATUM / Date / Date	5/08/2021

2. Producteigenschappen – Caractéristiques - Specifications

MATERIAALSOORT/Matériel / Material	RPET 90%		
GEWICHT / Poids / Weight	± 3.0 g / pc		
AFMETINGEN (BUITENKANT) / Dimensions (extérieur)	Diamètre	95	mm
	Hauteur	12	mm
DIKTE / Epaisseur / Thickness	300 µm		
KLEUR / Couleur / Colour	Transparent		
COMPATIBEL MET / Compatible avec	Kraft pot salade Ø 95mm		

3. Verpakkingswijze – Emballage- Packaging

AANTAL / Quantité / Quantity	1.000	stuks- pièces – pieces	/ karton - carton - box
AANTAL / Quantité / Quantity	30	dozen – cartons - boxes	/ pallet

VERKLARING VAN OVEREENSTEMMING – DECLARATION DE CONFORMITE – DECLARATION OF CONFORMITY

The supplier established in the Community:

Name of the supplier: **Ace Packaging NV.**
Complete address: **Industrieterrein 1/1 - IZ Webbekom 1013
3290 Diest - Belgium**

declares that the product described above complies with the requirements of:
Regulation EC 1935/2004 of 27th October 2004 (Framework Regulation)
Regulation EC 10/2011 of 14th January 2011 ("PIM"-regulation) including its amendments
Regulation EC 2023/2006 of 22th December 2006 ("GMP-regulation")
Directive 94/62/EC - art. 11 ("heavy metals")

in the following conditions of use:

- Type of food intended to come in contact with material/object:

All kind of food types

- Possible treatment of material/object:

The product can be handled in a temperature range from -20 °C to max. 50 °C but is typically used for food packaging to be stored and used under cooled (0 to 7 °C) and ambient (7 to 40 °C) temperatures.

The levels of **overall migration** values are according to aforementioned regulations below the tolerable limit value of 10 mg/dm² or 60 mg/kg respectively.

Testing conditions: OM2 test

Products are manufactured only with monomers, other starting substances and additives that are authorized under the Plastic regulation EC10/2011

All substances, with SML (**Specific Migration Limit**) or QM (Maximum Permitted Quantity of residual substance in the food contact material), used for this product, are clearly below the value of the mandatory limit listed in annex I & II of Regulation 10/2011/EC and all additional amendments of 10/2011/EC, until date of issue.

List of restricted substances (SML) present in the formulation of the material.

- Monoethylene Glycol (MEG) (Cas No. 00107-21-1) + Diethylene Glycol (DEG) (Cas No. 000111-46-6) with SML(T) 30 mg/kg, expressed as Ethylene glycol
- Terephthalic acid (Cas No. 0000100-21-0) with SML(T) 7,5 mg/kg food
- Isophthalic acid (Cas No. 0000121-91-5) with SML(T) 5 mg/kg food
- Antimony trioxide (CAS No. 0001309-64-4) with SML 0.040 mg/kg
- 3-aminopropyltriethoxy-silane (CAS 0000919-30-2) with SML 0.05 mg/kg
- Metals : Aluminium (SML 1 mg/kg), Barium (SML 1 mg/kg), Cobalt (SML 0.05 mg/kg), Copper (SML 5 mg/kg), Iron (SML 48 mg/kg), Lithium (0.6 mg/kg), Manganese (SML 0.6 mg/kg), Nickel (SML 0.02), Zinc (SML 5 mg/kg)

Products will not release **PAA's, (heavy) metals** exceeding the detection limits

Also a 10 ppb-screening is done in order to identify impurities, degradation products (=NIAS) and check the compliance. In the migration screening no substances were detected above the limit of detection (0.0017 mg/dm²)

Dual use additives:

Additive **E338** phosphoric acid is listed in Table 6 of Section A of EU 1130/2011 amending Annex III to Regulation No. 1333/2008 on food additives approved for use in food additives, food enzymes, food flavourings and nutrients and therefore it is a dual use additives.

Phosphoric acid (Ref. no. 72640 / CAS No. 007664-38-2) has no specific migration limit (SML) within Commission Regulation Eu No. 10/2011 on plastic materials and articles intended to come into contact with food.

Products do comply with the requirements regarding **functional barrier** application as listed in EU 10/2011 Article 13(2), (3) and (4) or Article 14(2) and(3).

- Shelf-life and material/object temperature:

Dry conditions, away from direct sun- and UV-light, avoid mechanical shocks, keep dust free in original closed boxes.

- Surface/volume ratio.

>6

Traceability:

Traceability of the product is ensured according to Regulation (EC) No. 1935/2004

Our statements are based on the conformity documents made available by our suppliers, migration tests carried out by us or by a third party. It is the customers own responsibility to test the suitability

Absence of BPA:

We also confirm, based on the statement of our supplier, that the PET material is free from **BPA** (CAS No. 80-05-7).

Compliance to REACH regulation EC 1907/2006:

The manufacturer of the packaging material described above, confirms that :

- His products are produced from monomers and other raw materials, which were duly registered according to the REACH requirements.
- Any chemical substances from Substances of Very High Concern (SVHC) list: 197 (last updated 15 January 2019 and published by ECHA <https://echa.europa.eu/nl/candidate-list-table>) are not used in production process of the PET packaging material described above.

Allergens:

We confirm that no substances listed in Annex II of Regulation EU no. 1169/2011 are used in the manufacture of the PET packaging material neither any raw materials are suspected of containing these substances.

(Appropriate information on all substances for which there are restrictions, at the level of the EU as well as at the Belgian level, so that all future users can comply with those restrictions. In the absence of any national or European regulation, all information on international restrictions, norms or guide values has to be provided (Council of Europe, WHO, Codex Alimentarius...))

Place, date

Diest, 01/04/20

Kelly Vannitsen i.o.v.

Olivier Stappaerts (CEO ACE Packaging)

A handwritten signature in blue ink, appearing to be "Olivier Stappaerts".

RESULTS



INNOFORM®

3 Overall Migration

Migration testing according to Regulation (EU) No. 10/ 2011 "on plastic materials and articles intended to come into contact with food" and the requirements of the standard EN 1186-1 ff. "Materials and articles in contact with foodstuffs – Plastics".

In Regulation (EU) No. 10/ 2011 the following overall migration limits (OML) are set:

- 10 mg / dm² of food contact surface
- 60 mg / kg food or food simulant (for materials intended for the contact with food for infants and young children)

To demonstrate compliance with the overall migration limit for all type of foods testing in food simulant A (Ethanol 10%) and food simulant B (Acetic Acid 3%) and simulant D2 (Vegetable Oil) shall be performed.

3.1 testing parameters

test standard	DIN EN 1186-1 till 9 ▲
Innoform SOP	046
test temperature [°C]	40 +/-1
test time	10d
Intended food contact conditions	OM 2 Any long term storage at room temperature or below, including when packaged under hot-fill conditions, and/or heating up to a temperature T where 70 °C ≤ T ≤ 100 °C for a maximum of t = 120/2 ⁴ ((T-70)/10) minutes. Test OM 2 covers also food contact conditions described for OM1 and OM3
testing modus	cell
test area	0,5 dm ²
simulant (amount/volume)	25 ml

3.1.1 overall migration [mg/dm²]

food simulant **A (Ethanol 10% (v/v))**

Innoform sample no. description/ designation given by client	average	single values	note
137079 (Salad Bowl Round - High, Item no. 001005)	< 1	< 1 < 1 < 1	limit: compliant

food simulant **B (Acetic Acid 3% (w/v))**

Innoform sample no. description/ designation given by client	average	single values	note
137079 (Salad Bowl Round - High, Item no. 001005)	< 1	< 1 < 1 < 1	limit: compliant


food simulant

Method for determining the mass of moisture-sensitive samples

D2 (Vegetable Oil- Olive Oil)

conditioning at 50% rH

Innoform sample no. description/ designation given by client	average	single values	note
137079 (Salad Bowl Round - High, Item no. 001005)	< 3	< 3 < 3 < 3	limit: compliant

 Result with correction for the loss of volatile compounds of 4,5 mg/dm²

4 Specific Migrationlimits (SML) / individual substances

4.1 substance: ethyleneglycol

test standard	inhouse method Ø
FCM substance no.	227
Ref. no.	16990/ 53850
CAS no.	0000107-21-1
limit value	30 mg/kg food (SML(T))
restrictions and/or specifications	Group Restriction No 2; SML (T) 30 [mg/kg]; expressed as ethyleneglycol; FCM substance No 89, 227, 283, 1048
testing modus	extraction
food simulant	residue or content determination
method	GC/MS

Sample 137079 Salad Bowl Round - High, Item no. 001005	result	dimension
results	18	mg/kg material (ppm)
calculation with grammage of approx. 3,8 g/dm ² (measured at the bottom)	0,068	mg/dm ²
calculation (EU-cube: 6 dm ³ / kg food) ¹	0,41	mg/kg food
Limit compliant applying a surface to volume ratio of max. 440 dm ² / kg food		

¹ Containers and other articles, containing or intended to contain, less than 500 millilitres or grams or more than 10 litres the value of migration shall be expressed in mg/kg applying a surface to volume ratio of 6 dm²/ kg food.



4.2 substance: diethyleneglycol (expressed as ethyleneglycol)

test standard	inhouse method Ø
FCM substance no.	263
Ref. no.	13326/ 15760/ 47680
CAS no.	0000111-46-6
limit value	30 mg/kg food (SML(T))
restrictions and/or specifications	Group Restriction No 2; SML (T) 30 [mg/kg]; expressed as ethyleneglycol; FCM substance No 89, 227, 263, 1048
food simulant	residue or content determination
method	GC/MS

Sample 137079 Salad Bowl Round - High, Item no. 001005	result	dimension
results	< 5 (< LQ)	mg/kg material (ppm)
calculation with grammage of approx. 3,8 g/dm ² (measured at the bottom)	< 0,02 (< LQ)	mg/dm ²
calculation (EU-cube: 6 dm ³ / kg food) ¹	< 0,1 (< LQ)	mg/kg food
Limit compliant applying a surface to volume ratio of max. 1500 dm ² / kg food		

4.3 substance: terephthalic acid

test standard	inhouse method Ø
FCM substance no.	785
Ref. no.	24910
CAS no.	0000100-21-0
limit value	7,5 mg/kg food (SML(T))
restrictions and/or specifications	Group Restriction No 28; SML (T) 7,5 [mg/kg]; expressed as terephthalic acid; FCM substance No 191, 192, 785
food simulant	residue or content determination
method	GC/MS Isotop dilution analysis

Sample 137079 Salad Bowl Round - High, Item no. 001005	result	dimension
results	< 5 (< LQ)	mg/kg material (ppm)
calculation with grammage of approx. 3,8 g/dm ² (measured at the bottom)	< 0,02 (< LQ)	mg/dm ²
calculation (EU-cube: 6 dm ³ / kg food) ¹	< 0,1 (< LQ)	mg/kg food
Limit compliant applying a surface to volume ratio of max. 370 dm ² / kg food		



4.4 substance: isophthalic acid

test standard	inhouse method Ø
FCM substance no.	291
Ref. no.	19150
CAS no.	0000121-91-5
limit value	5,0 mg/kg food (SML(T))
restrictions and/or specifications	Group Restriction No 27; SML (T) 5 [mg/kg]; expressed as isophthalic acid; FCM substance No 188, 291
food simulant	residue or content determination
method	GC/MS Isotop dilution analysis

Sample 137079 Salad Bowl Round - High, Item no. 001005	result	dimension
results	< 0,5 (< LQ)	mg/kg material (ppm)
calculation with grammage of approx. 3,8 g/dm ² (measured at the bottom)	< 0,002 (< LQ)	mg/dm ²
calculation (EU-cube: 6 dm ³ / kg food) ¹	< 0,01 (< LQ)	mg/kg food
Limit compliant applying a surface to volume ratio of max. 2500 dm ² / kg food		

4.5 substance: antimony trioxide (expressed as antimony)

test standard	DIN EN 13130-1 (migration) Ø
FCM substance no.	398
Ref. no.	35780
CAS no.	0001309-64-4
limit value	0,040 mg/kg food (SML)
test time	10d
test temperature [°C]	40
testing modus	cell
test area	0,5 dm ²
simulant (amount/volume)	25 ml
food simulant	B (acetic acid 3% (w/v))
method	ICP-MS

Sample 137079 Salad Bowl Round - High, Item no. 001005	result	dimension
results	< 0,01 (< LQ)	mg/kg simulant
calculation with grammage of approx. 3,8 g/dm ² (measured at the bottom)	< 0,0005 (< LQ)	mg/dm ²
calculation (EU-cube: 6 dm ³ / kg food) ¹	< 0,003 (< LQ)	mg/kg food
Limit compliant applying a surface to volume ratio of max. 80 dm ² / kg food		



4.6 substance: 3-aminopropyltriethoxy-silane

test standard	inhouse method Φ
FCM substance no.	377
Ref. no.	12788
CAS no.	0000919-30-2
limit value	0,05 mg/kg food (SML)
restrictions and/or specifications	Residual extractable content of 3- aminopropyltriethoxysilane to be less than 3 mg/kg filler when used for the reactive surface treatment of inorganic fillers. SML = 0,05 mg/kg when used for the surface treatment of materials and articles.
food simulant	residue or content determination
method	HPLC-MS/MS

digital water mark
- will not be printed -

Sample 137079 Salad Bowl Round - High, Item no. 001005	result	dimension
results	< 0,15 (< LQ)	mg/kg material (ppm)
calculation with grammage of approx. 3,8 g/dm ² (measured at the bottom)	< 0,0006 (< LQ)	mg/dm ²
calculation (EU-cube: 6 dm ² / kg food) ¹	< 0,004 (< LQ)	mg/kg food
Limit compliant applying a surface to volume ratio of max. 80 dm ² / kg food		

notes for sml measurements			
LQ	limit of quantification	LD	limit of detection

5 Primary aromatic amines, photometric, summation method

5.1 Information

Isocyanates may migrate into food simulants. However these substances are not stable in any of the listed food simulants. They are converted into amines in food simulant B (acetic acid 3%). The measurement of the corresponding amines can be used as a screening method.

5.2 testing parameters

test standard	§ 64 LFGB method L 00.006 Φ
Innoform SOP	032
type of sampling	from a single sample
simulant	B (acetic acid 3% (w/v))
testing modus	full immersion
test area	2,0 dm ²
simulant (volume)	100 ml
test temperature [°C]	70
test time	2h
migration date	21.10.2019
migration end	21.10.2019
measurement range	0.2 til 6 μ g aniline hydrochlorid / 100ml migration solution



5.2.1 Anilin hydrochloride [$\mu\text{g}/100 \text{ ml}$]

Innoform sample no. description/ designation given by client	result	note
137079 (Salad Bowl Round - High, Item no. 001005)	< 0,2	limit: compliant

5.2.2 Anilin [$\mu\text{g}/100 \text{ ml}$]

Innoform sample no. description/ designation given by client	result	note
137079 (Salad Bowl Round - High, Item no. 001005)	< 0,14	limit: compliant

notes for sml measurements			
LQ	limit of quantification	LD	limit of detection

5.3 Information for rating of the results

According to Annex II of Regulation (EU) No. 10/2011 plastic materials and articles shall not release primary aromatic amines, excluding those appearing in Table 1 of Annex I of the regulation, in a detectable quantity into food or food simulant. The detection limit is 0,01 mg of substance per kg of food or food simulant. The detection limit applies to the sum of primary aromatic amines released. It should be noted that PAA listed in Table 1 of Annex I of the Regulation remain excluded from the restriction of Annex II.2. and shall continue to be checked individually against their specific migration limit.

A compliance test by screening method L 00.00 6 according to § 64 LFGB can be used for an estimation.

If the test results according method L 00.00 6 are below the detection limit of 0,2 μg Anilin/ 100 ml simulant, the conformance with the demands of Regulation (EU) No. 10/2011 can be assumed (relating to opinion of former BgVV nowadays BfR Bundesinstitut für Risikobewertung). If the results according method L 00.00 6 § 64 LFGB are above the detection limit of 2 ppb compliance with Regulation (EU) No. 10/2011 must be verified by means of specific migration tests.

According to the final report of the German Federal Ministry of Education and Research (BMBF) project FKZ 0330347 "early detection and assurance of conformity of isocyanate-functional layers" (01.07.2002 to 30.04.2005) the measurement with 3% acetic acid at 2 h / 70 ° C onesided contact as the most appropriate method of conformity testing. In the case of polyolefin inner layers, this extraction test is the more stringent method for amine testing compared to the 10 day test at 40 ° C.

The photometric determination is a suitable sum method for first screening of primary aromatic amines. However, the possible interferences and influences of the chemical properties of the individual response factors have to be identified and quantified for an evaluation of the results with sufficient certainty.



6 Heavy metals / metals

6.1 testing parameters

test standard	multi-methode based on DIN EN ISO 17294-2 Θ
limit	Aluminium = 1 mg/kg food or food simulant Barium = 1 mg/kg food or food simulant Cobalt = 0,05 mg/kg food or food simulant Copper = 5 mg/kg food or food simulant Iron = 48 mg/kg food or food simulant Lithium = 0,8 mg/kg food or food simulant Manganese = 0,8 mg/kg food or food simulant Nickel = 0,02 mg/kg food or food simulant Zinc = 5 mg/kg food or food simulant.
test time	10d
test temperature [°C]	40
testing modus	cell
test area	0,5 dm ²
simulant (amount/volume)	25 ml
food simulant	B (acetic acid 3% (w/v))
test method	ICP-MS

6.1.1 Sample: 137079 (Salad Bowl Round - High, Item no. 001005)

6.1.1.1 measured value [mg/L simulant]

substance	CAS-Nr.	result	Limit [mg/kg food]
aluminium (Al)	0007429-90-5	0,15	1
barium (Ba)	0007440-39-3	< 0,01 (< LQ)	1
cobalt (Co)	0007440-48-4	< 0,005 (< LQ)	0,05
copper (Cu)	0007440-50-8	< 0,005 (< LQ)	5
iron (Fe)	0007439-89-6	0,05	48
lithium (Li)	0007439-93-2	< 0,01 (< LQ)	0,8
manganese (Mn)	0007439-96-5	< 0,005 (< LQ)	0,8
nickel (Ni)	0007440-02-0	< 0,005 (< LQ)	0,02
zinc (Zn)	0007440-66-6	0,01	5

6.1.1.2 calculation [mg/dm²]

substance	CAS-Nr.	result	Limit compliant applying a surface to volume ratio of
aluminium (Al)	0007429-90-5	0,0075	max. 130 dm ² / kg food
barium (Ba)	0007440-39-3	< 0,0005 (< LQ)	max. 2.000 dm ² / kg food
cobalt (Co)	0007440-48-4	< 0,0003 (< LQ)	max. 160 dm ² / kg food
copper (Cu)	0007440-50-8	< 0,0003 (< LQ)	> 10.000 dm ² / kg food
iron (Fe)	0007439-89-6	0,0025	> 10.000 dm ² / kg food
lithium (Li)	0007439-93-2	< 0,0005 (< LQ)	max. 1.200 dm ² / kg food -
manganese (Mn)	0007439-96-5	< 0,0003 (< LQ)	max. 2.000 dm ² / kg food
nickel (Ni)	0007440-02-0	< 0,0003 (< LQ)	max. 60 dm ² / kg food
zinc (Zn)	0007440-66-6	0,0005	max. 10.000 dm ² / kg food



notes for sml measurements			
LQ	limit of quantification	LD	limit of detection

digital water mark
- will not be printed -

7 10 ppb- screening with GC-MS

The screening is used for a compliance check and should identify substances, such as degradation products and impurities, which may be problematic in the assessment of compliance. The test is performed with food simulants, which usually overestimate the migration. Therefore the results of this worst-case analysis should be assessed regarding to the intended use.

7.1 testing parameters

test standard	Inhouse method GC-FID-MS ▲
Innoform SOP	055
repeated use article	no
food simulant	Ethanol 95 Vol.-%
test time	10d
test temperature [°C]	40
test area	0,5 dm ²
simulant (amount/volume)	25 ml
test method	The semi quantitative analyses were carried out by capillary gas chromatography with flame ionization detection (GC-FID) against the internal standard. The identification of the detectable substances was carried out by capillary gas chromatography coupled with a mass spectrometer (GC-MS) based on the mass spectra in comparison with the NIST-library (National Institute of Standard & Technology) and a private mass spectra library within a retention time frame from n-decane to n-tetracontane (n-C40).
analytical tolerance	+/- 80%

7.2 results for sample 137079 (Salad Bowl Round - High, Item no. 001005)

7.2.1 table 1: migration of substances listed in Regulation (EU) no 10/2011

peak	FCM	substance	limit	measured value [mg C13-equiv./dm ²]	conversion (EU cube: 6dm ³ /kg food) [mg/kg food]	limit complied	
						yes	comment
No substances detected above 0,0017 mg/dm ² (limit of detection)							

7.2.2 table 2: migration of impurities and degradation products(= NIAS - non intentionally added substances)

peak	substance	measured value [mg C13-equiv./dm ²]	conversion (EU cube: 6dm ³ /kg food) [mg/kg food]	comment
No substances detected above 0,0017 mg/dm ² (limit of detection)				



digital water mark
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7.2.3 Overall sum of all peaks in the chromatogram (up to n-C45)
< 0,0017 (< LD) [mg C13-equiv./dm²]

7.3 Evaluation of sample 137079 (Salad Bowl Round - High, Item no. 001005)

In the migration screening no substances were detected above the limit of detection (0,0017 mg/dm²).

7.4 Notes on the tables

According Regulation (EU) No 10/2011 article 17 applies "... To check the compliance, the specific migration values shall be expressed in mg/kg applying the real surface to volume ratio in actual or foreseen use. For containers and other articles, containing or intended to contain, less than 500 millilitres or grams or more than 10 litres, materials and articles for which, due to their form it is impracticable to estimate the relationship between the surface area of such materials or articles and the quantity of food in contact therewith, sheets and films that are not yet in contact with food, sheets and films containing less than 500 millilitres or grams or more than 10 litres, the value of migration shall be expressed in mg/kg applying a surface to volume ratio of 6 dm² per kg of food. This paragraph does not apply to plastic materials and articles intended to be brought into contact with or already in contact with food for infants and young children ..."

The limit values listed in Table 1 are taken from Table 1 of Regulation (EU) No 10/2011. Due to the analytical tolerance, the measured value is only compliant with the limit if the value is max. 50% of the limit.

Kind regards



Heike Schwertke (Test Manager)
Innoform GmbH
Testservice



The test samples are kept for you for a period of 6 months.
The copying of extracts from our test reports is not permitted without our prior approval.