

24.13700

IISG



TEST REPORT: 24.13700

This report is composed by 12 pages, of which: 2 pages for the Summary

10 pages for the Report 24.13700a

Date in sample:26 March 2024Issue date:6 May 2024

MANUFACTURER Q24227 APPLICANT Q24227

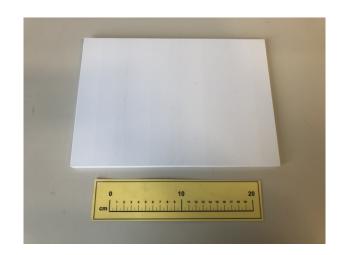
The Good Plastic Company BV The Good Plastic Company BV

Keersluisweg 7 Hall 1 Keersluisweg 7 Hall 1

1332 EE Almere NETHERLANDS 1332 Almere NETHERLANDS

SAMPLE DESCRIPTION (no. 786509)

Polygood Panel





TEST REPORT: 24.13700 dated 06 May 2024

SAMPLE DESCRIPTION (no. 786509)

Polygood Panel

TEST PERFORMED

Commission Regulation (EU) 2023/1627 of 10 August 2023 - Annex II, point 2 - Primary Aromatic Amines	Complies
Commission Regulation (EU) 2023/1627 of 10 August 2023, Chapter 2, Article 12 - Overall Migration	Complies
Commission Regulation (EU) 2023/1627 of 10 August 2023, Annex II, Point 1 - Specific Migration of Certain Substances (AI, Ba, Co, Cu, Fe, Li, Mn, Ni, Zn, Sb, As, Cd, Cr, Eu, Gd, La, Pb, Hg, Tb)	Complies
Ministerial Decree of 21st, March, 1973 - Colorant Migration Test for Food Contact Article	Complies

NA = Not Applicable; NR = Not Required

Note: it is prohibited the partial reproduction, any changes or modifications of this test report. Sampling performed by the customer.

Data contained in the first page of this document have been declared by the client, the laboratory is not responsible for the results that could be influenced by such data.

Data related to the sample have been provided by the customer.

The results are exclusively referred to the samples tested as received by the laboratory unless otherwise specified.

Conclusions/judgments are expressed with exclusive reference to parts detailed in the following pages and based on limits there specified.

Recovery between 80-110% is not indicated on test reports and it is not considered in the final calculation.

DECISION RULE: The declaration of conformity is given not taking into account the measurement uncertainty.

emical Laboratory Supervisor Luciano Buraschi





TEST REPORT: 24.13700a dated 6/5/2024

This section is an integral part of the TEST REPORT 24.13700

DATES APPLICANT

Test beginning: 27/3/2024 **Issue date:** 6/5/2024

The Good Plastic Company BV



SAMPLE DESCRIPTION

Polygood Panel

Inspection before test: NO DEFECT

TEST METHODS	CONCLUSIONS
Overall and Specific Migrations	COMPLIES



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Conclusion

The results of migration found **DO COMPLY** with the following Legislations:

- Italian Ministerial Decree 21.3.1973 hygienic discipline of packaging, containers and utensils intended to come into contact with foodstuffs or with substances for personal use and further amendments
- COMMISSION REGULATION (EU) No 10/2011 on plastic materials and articles intended to come into contact with food and further amendments.

The results are referred to plastic articles intended to repeated contact for 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 \leq T \leq 100 °C for a maximum of t = 120/2^((T-70)/10) minutes with all kinds of foods

Note:

A) According to specification of Annex V- Compliance testing, chapter 3, point 3.1 Standardized testing conditions of COMMISSION REGULATION (EU) No 10/2011, for the evaluation of overall migration, tests have been performed under standardized conditions OM2 [10 days at 40 °C] and the corresponding (for the use of alternative simulants) with all kinds of foods.

- B) Specifications on the use of the article
- (i) type or types of food with which it is intended to be put in contact:
- All kinds of foods.
- (ii) time and temperature of treatment and storage in contact with the food:
- -Repeated contact for 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 $\leq T \leq$ 100 °C for a maximum of $t = 120/2^{\circ}((T-70)/10)$ minutes. (iii) ratio of food contact surface area to volume used to establish the compliance of the material or article: 6 dm^2/Kg
- C) According to specification of Annex V- Compliance Testing, chapter 3, point 3.4.2 Food simulant substitutes of COMMISSION REGULATION (EC) No 10/2011, test for overall and specific migration in fatty foods have been performed using the appropriate alternative simulants (95% ethanol and isooctane) and considering the highest migration value found. For point 2.2.4 of the aforementioned Regulation, the appropriate specific migrations were carried out in the appropriate alternative simulant
- D) Tests have been performed according to specific request of the client



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Samples parts description submitted to tests

N.	Tested Component
01	Plastic Panel
01	Flastic Fallet

Test Results

Overall & Colorant Migration to Aqueous and Acid foods simulant	Complies
Overall & Colorant Migration to Milky and Alcoholic foods simulant	Complies
Overall & Colorant Migration to Fatty foods simulant	Complies
Specific Migration of Primary Aromatic Amines	Complies
Specific Migration of certain substances	Complies
	•



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Test	Determination of Overall Migration										
Method		REGULATION (EC) 10/2011 Annex III and V + EN 1186-3:2022 Test methods for overall migration in evaporable simulants (Method 1a: total immersion in conventional oven)									
Principle		The sample is put in contact with the appropriate food simulants, overall migration is determined according to the procedure specified in the methods above indicated.									
Tested parts: F	Plastic Panel										
	Food Simulants		Results								
3%	Acetic Acid (w/v) in aqueous solution	First Contact	Second Contact	Third Contact							
C /0	[10 days at 40°C]	< 3.0 mg/dm ²	< 3.0 mg/dm ²	< 3.0 mg/dm ²							
	Stability ⁽¹⁾		Complies								
50)% Ethanol (v/v) in aqueous solution	First Contact	Second Contact	Third Contact							
	[10 days at 40°C]	< 3.0 mg/dm ²	< 3.0 mg/dm ²	< 3.0 mg/dm ²							
	Stability ⁽¹⁾		Complies								
95	5% Ethanol (v/v) in aqueous solution	First Contact	Second Contact	Third Contact							
	[10 days at 40°C]	< 3.0 mg/dm ²	< 3.0 mg/dm ² < 3.0 mg/dm ²								
	Stability ⁽¹⁾		Complies								
	Limits		10.0 mg/dm²								

Notes:

⁽¹⁾ The overall migration in the second contact must not exceeds the value observed in first contact and the overall migration in the third contact must not exceeds the value observed in the second contact.

The symbol < followed by a number indicates that the concentration of the analyte is less than the detection limit expressed by that number.



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	Limits	Transmittance not less than 95%								
	Vegetable Oil [10 days at 40°C]	Transmittance not less than 95%								
50%	Ethanol (v/v) in aqueous solution [10 days at 40°C]	Transmittance not less than 95%								
3% A	cetic Acid (w/v) in aqueous solution [10 days at 40°C]	Transmittance not less than 95%								
	Food Simulants	Results								
Tested parts: Pla	astic Panel									
Principle		The sample is put in contact (repeated) with the appropriate food simulants, colorant migration is determined according to the procedure specified in the methods above indicated.								
Equipments	UV-Visible Spectrophotometer									
	Annex IV - Section VII	Annex IV - Section VII								
Method	DM 21/03/1973 and further amendments	DM 21/03/1973 and further amendments								
Test	Determination of Colorant Migration									



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dated 6/5/2024

Test	Determination of Primary Aromatic An	nines Release									
Method	According to Protocol A by LC-MS - EUR	According to Protocol A by LC-MS - EUR 24815 EN 2011									
Equipment	Liquid Chromatograph with Mass Spectrometer Detector (LC-MSD)										
Principle	The sample is put in contact with the app determined according to the procedure sp										
Tested Parts: F	Plastic Panel										
	Food Simulants	Re	esults ⁽²⁾								
3% A	cetic Acid (w/v) in aqueous solution [10 days at 40°C]	Total PA	AAs ⁽¹⁾ < 0.01								
	Limit ⁽²⁾	Total P	AAs ⁽¹⁾ < 0.01								
	Substances	Results ⁽²⁾	Limits ⁽²⁾								
2,2-dichloro-	4,4'-methylenediamine (CAS 101-14-4)	< 0.002	< 0.002								
	-trimethylaniline (CAS 137-17-7)	< 0.002	< 0.002								
	Methoxyaniline (CAS 90-04-0)	< 0.002	< 0.002								
	naphthylamine (CAS 91-59-8)	< 0.002	< 0.002								
3,3'-d	dichlorobenzidine (CAS 91-94-1)	< 0.002	< 0.002								
	nethoxybenzidine (CAS 119-90-4)	< 0.002	< 0.002								
	methylbenzidine (CAS 119-93-7)	< 0.002	< 0.002								
4,4'-meth	nylenedi-o-toluidine (CAS 838-88-0)	< 0.002	< 0.002								
4,4	'-oxydianiline (CAS 101-80-4)	< 0.002	< 0.002								
4,4	'-thiodianiline (CAS 139-65-1)	< 0.002	< 0.002								
4,4'-diami	nodiphenylmethane (CAS 101-77-9)	< 0.002	< 0.002								
	ninoazobenzene (CAS 60-09-3)	< 0.002	< 0.002								
4-ch	nloro-o-toluidine (CAS 95-69-2)	< 0.002	< 0.002								
4-0	chloroaniline (CAS 106-47-8)	< 0.002	< 0.002								
	m-phenylenediamine (CAS 615-05-4)	< 0.002	< 0.002								
4-methyl-	m-phenylenediamine (CAS 95-80-7)	< 0.002	< 0.002								
	itro-o-toluidine (CAS 99-55-8)	< 0.002	< 0.002								
6-metl	hoxy-m-toluidine (CAS 120-71-8)	< 0.002	< 0.002								
	Benzidine (CAS 92-87-5)	< 0.002	< 0.002								
Biph	nenyl-4-ylamine (CAS 92-67-1)	< 0.002	< 0.002								
o-ar	minoazotoluene (CAS 97-56-3)	< 0.002	< 0.002								
	o-toluidine (CAS 95-53-4)	< 0.002	< 0.002								

Notes:

The symbol < followed by a number indicates that the concentration of the analyte is less than the detection limit expressed by that number.

⁽¹⁾ PAAs (Primary Aromatic Amines) include the substances not listed in entry 43 to Apprendix 8 of Annex XVII to Regulation (EC) No 1907/2006 which are Aniline; 2,4-Dimethylaniline; 2,6-Dimethylaniline; m-Phenylenidiamine and 2,6-Toluenediamine. (2) The results and limits are expressed in mg/Kg



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Test	Specific Migration of certain substances											
Method	EN 13130-1:2004+ISO 17294-2:2023											
Equipment	ICP-MS (mass spectrometry)											
	The sample is put in contact with the appropriate food simulants, specific migration of certain substances is determined according to the procedure specified in the methods above indicated.											
First Contact												
Tested Parts: Plast	ic Panel											
Food Simu	ılants					Resu	ılts ⁽¹⁾					
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
3% Acetic Acid (w/	v) in aqueous	< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
solutio [10 days at	on .	As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
[10 aayo aa		< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
50% Ethanol (v/v)) in aqueous	< 0.2	< 0.2	< 0.01	<1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
solutio	n	As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
[10 days at	40 Cj	< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	
Second Contact												
Tested Parts: Plasti	ic Panel											
Food Simu		1				Posi	ılts ⁽¹⁾					
Food Sillic	iiaiits	1	1	ı		Kesi	1112,,,	1	ı			
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
3% Acetic Acid (w/		< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
[10 days at		As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
		< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	
		AI	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
50% Ethanol (v/v)		< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
[10 days at		As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
		< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	

Notes:

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⁽¹⁾ The results are expressed in mg/Kg

⁽²⁾ OM means "Overall Migration" of Ammonium, Calcium, Potassium, Magnesium and Sodium that are subjected to limitation (60 mg/Kg) due to Article 11(3) and Article 12 of the Regulation mentioned above.

The symbol < followed by a number indicates that the concentration of the analyte is less than the detection limit expressed by that number.



TEST REPORT: 24.13700a dated 6/5/2024

	Specific Migration of certain substances										
EN 13130-1:2004+ISO 17294-2:2023											
ICP-MS (mass spectrometry)											
The sample is put in contact with the appropriate food simulants, specific migration of certain substances is determined according to the procedure specified in the methods above indicated.											
anel											
ts					Resu	ılts ⁽¹⁾					
	Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
n aqueous	< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
C]	As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
	< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	
Stability	y ⁽³⁾						Compli	es			
	ΔI	Ba	Co	Cu	Fe	l i	Mn	Ni	<i>7</i> n	Sb	
aqueous	< 0.2	< 0.2	< 0.01	<1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
C1	As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
-	< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	
Stability	y ⁽³⁾						Compli	es			
	Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
	< 1	< 1	< 0.05	< 5	< 48	< 0.6	< 0.6	< 0.02	< 5	< 0.04	
	As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
	< 0.01	< 0.002	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01	< 0.05	< 60	
	e sample is permined accommend accom	P-MS (mass spectrome estample is put in contermined according to the ermined according to the er	P-MS (mass spectrometry) e sample is put in contact with the ermined according to the process anel anel ts Al Ba < 0.2 < 0.2 As Cd < 0.003 < 0.001 Stability(3) Al Ba < 0.2 < 0.2 As Cd < 0.003 < 0.001 Stability(3) Al Ba < 1 < 1 As Cd As Cd	P-MS (mass spectrometry) e sample is put in contact with the appropermined according to the procedure spectrometry anel ts Al Ba Co	P-MS (mass spectrometry) a sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food ermined according to the procedure specified in the sample is put in contact with the appropriate food and in the sample is put in contact with the appropriate food and in the sample is put in the procedure specified in the sample is put in the procedure specified in the sample is put in the procedure specified in the sample is put in the procedure specified in the sample is put in the sample is put in the sample is put in the procedure specified in the sample is put in the sample is	P-MS (mass spectrometry) e sample is put in contact with the appropriate food simulan ermined according to the procedure specified in the method and according to the procedure specified in the method and according to the procedure specified in the method and according to the procedure specified in the method and according to the procedure specified in the method and according to the method and according to the procedure specified in the method and according to the method according	P-MS (mass spectrometry) as sample is put in contact with the appropriate food simulants, specific ermined according to the procedure specified in the methods above anel Tan aqueous Al Ba Co Cu Fe Li 	Al Ba Co Cu Fe Li Mn Complication Complication Complication Complication	Al Ba Co Cu Fe Li Mn Ni Complies Compli	P-MS (mass spectrometry) as sample is put in contact with the appropriate food simulants, specific migration of certain substate ermined according to the procedure specified in the methods above indicated. The procedure	

Notes:

⁽¹⁾ The results and limits are expressed in mg/Kg
(2) OM means "Overall Migration" of Ammonium, Calcium, Potassium, Magnesium and Sodium that are subjected to limitation (60 mg/Kg) due to Article 11(3) and Article 12 of the Regulation mentioned above.

⁽³⁾ The specific migration in the second contact must not exceeds the value observed in first contact and the specific migration in the third contact must not exceeds the value observed in the second contact.

The symbol < followed by a number indicates that the concentration of the analyte is less than the detection limit expressed by that number.



TEST REPORT: 24.13700a dated 6/5/2024

Test	Specific Migration of certain substances										
Method	EN 13130-1:2004+ISO 17294-2:2023										
Equipment	ICP-MS (mass spectrometry)										
Principle	The sample is put in contact with the appropriate food simulants, specific migration of certain substances is determined according to the procedure specified in the methods above indicated.										
First Contact											
Tested Parts: Plas	tic Panel										
Food Sim	ulants					Resu	ılts ⁽¹⁾				
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb
95% Ethanol (v/		< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01
soluti [10 days a		As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾
	-	< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20
Second Contact											
Tested Parts: Plas	tic Panel										
Food Sim	ulants					Resu	ılts ⁽¹⁾				
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb
95% Ethanol (v/\		< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01
solution [10 days at 40°C]		As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾
. , .		< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20

Notes:

The symbol < followed by a number indicates that the concentration of the analyte is less than the detection limit expressed by that number

⁽¹⁾ The results are expressed in mg/Kg
(2) OM means "Overall Migration" of Ammonium, Calcium, Potassium, Magnesium and Sodium that are subjected to limitation (60 mg/Kg) due to Article 11(3) and Article 12 of the Regulation mentioned above.



TEST REPORT: 24.13700a dated 6/5/2024

Test	Specific Migra	tion of ce	rtain sub	stances								
Method	EN 13130-1:2004+ISO 17294-2:2023											
Equipment	ICP-MS (mass spectrometry)											
Principle	The sample is put in contact with the appropriate food simulants, specific migration of certain substances is determined according to the procedure specified in the methods above indicated.											
Third Contact												
Tested Parts: Plast	tic Panel											
Food Sim	ulants					Resu	ılts ⁽¹⁾					
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
95% Ethanol (v/v) in aqueous	< 0.2	< 0.2	< 0.01	< 1	< 10	< 0.1	< 0.1	< 0.01	< 0.5	< 0.01	
solutio [10 days at		As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
. ,	•	< 0.003	< 0.001	< 0.003	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.01	< 20	
	Stabilit	y ⁽³⁾						Compli	es			
		Al	Ва	Со	Cu	Fe	Li	Mn	Ni	Zn	Sb	
		< 1	< 1	< 0.05	< 5	< 48	< 0.6	< 0.6	< 0.02	< 5	< 0.04	
Limits	(1)	As	Cd	Cr	Eu	Gd	La	Pb	Hg	Tb	OM ⁽²⁾	
		< 0.01	< 0.002	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01	< 0.05	< 60	

••• END OF REPORT•••

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⁽¹⁾ The results and limits are expressed in mg/Kg
(2) OM means "Overall Migration" of Ammonium, Calcium, Potassium, Magnesium and Sodium that are subjected to limitation (60 mg/Kg) due to Article 11(3) and Article 12 of the Regulation mentioned above.

⁽³⁾ The specific migration in the second contact must not exceeds the value observed in first contact and the specific migration in the third contact must not exceeds the value observed in the second contact.

The symbol < followed by a number indicates that the concentration of the analyte is less than the detection limit expressed by that number