



Date, April 17th, 2015
 TR n° **094-A/2015**
 Ref. Your Ord. n°9443002407 del 30.01.15

To
 ALFAGOMMA INDUSTRIAL S.p.A.
 Zona Industriale S. Atto
 64020 S. ATTO TERAMO (TE)

Received 13.02.2015 Start tests 04.03.2015 End tests 31.03.2015 Page 1 of 3

T E S T R E P O R T

Subject: SUITABILITY TO BE USE IN CONTACT WITH FOODS, OF A POLYETHYLENE FILM MARKED "Transparent UHMWPE", ACCORDING TO THE EU REGULATION n°10/2011

Sample	Transparent UHMWPE	Test Method	Requirements DM 21/03/73 DM 26/04/93 N.220 DM 24/09/96 N.572
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TESTS CONDITION

Simulators

B Acetic Acid 3% (p/v) in water solution	--- Ethanol 96% (v/v) in water solution	Regulation EU n°10/2011 Annex III
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Time and temperature of contact

2 hours at 70°C (Standardized test conditions OM3)	Regulation EU n°10/2011 Annex V - Table 3
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TESTS

<u>Standard migration</u>	mg/kg	10,7	9,2	DM 26/04/93 N. 220 Ann. III Sez. 1/B	≤ 60
<u>Migration of:</u>					
• Iron	mg/kg	< 0,01	< 0,01		≤ 48
• Litium	mg/kg	< 0,01	< 0,01	Regulation EU n°10/2011	≤ 0,6
• Barium	mg/kg	< 0,01	< 0,01	Annex II - Point 1	≤ 1,0
• Cobalt	mg/kg	< 0,01	< 0,01		≤ 0,05
• Copper	mg/kg	< 0,5	< 0,5		≤ 5,0
• Manganese	mg/kg	< 0,1	< 0,1		≤ 0,6
• Zinc	mg/kg	< 0,01	< 0,01		≤ 2,5
<u>Migration of primary amines</u>	ppm	0,002	< 0,002	Regulation EU n°10/2011 Annex II - Point 2	≤ 0,02

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TR n° 094-A/2015

Page 2 of 3

T E S T R E P O R T

<u>Sample</u>	<u>Transparent UHMWPE</u>	<u>Test method</u>	<u>Requirements</u>
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DM 21/03/73
DM 26/04/93 N.220
DM 24/09/96 N.572

TESTS CONDITION

Simulators

D2
Rectified Olive Oil

Regulation EU n°10/2011
Annex III

Time and temperature of contact

2 hours 70°C
(Standardized test conditions **OM3**)

Regulation EU n°10/2011
Annex V - Table 3

TESTS

<u>Global Migration</u>	mg/kg	7,9	DM 26/04/93 N. 220 Ann. III Sec. 1/B e 1/C	≤ 60
<u>Migration of:</u>				
• Iron	mg/kg	< 0,01		≤ 48
• Litium	mg/kg	< 0,01		≤ 0,6
• Barium	mg/kg	< 0,01		≤ 1,0
• Cobalt	mg/kg	< 0,01	Regulation EU n°10/2011 Annex II – Point 1	≤ 0,05
• Copper	mg/kg	< 0,5		≤ 5,0
• Manganese	mg/kg	< 0,1		≤ 0,6
• Zinc	mg/kg	< 0,01		≤ 2,5
<u>Migration of primary amines</u>	ppm	0,007	Regulation EU n°10/2011 Annex II – Point 2	≤ 0,02



Date, April 17th, 2015TR n° **094-A/2015**

Page 3 of 3

T E S T R E P O R T

COMMENT

On the basis of the test results and on the basis of the recipe provided by the Customer, we certify that the polyethylene film marked "**Transparent UHMWPE**", **is suitable** with the Requirements of the EU Regulation n°10/2011, **for the contact with the following foods:**

- **Acid, Alcoholic until 96% and Fatty** for any extended food-storage application at ambient temperature and also in the range of 2 hours for application at temperature until 70°C or in the range of 15 minutes for application until 100°C, not followed by prolonged storage at room temperature or refrigeration.

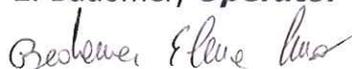
The sampling has been carried out by the Customer.
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The contained results refer only to the tested sample.
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E. Badomer, **Operator**



F. Negroni, **Director**





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Page 1 of 3

T E S T R E P O R T

Subject: SUITABILITY TO BE USE IN CONTACT WITH FOODS, OF A POLYETHYLENE FILM MARKED "Conductive UHMWPE", ACCORDING TO THE EU REGULATION n°10/2011

Sample

Conductive UHMWPE

Test Method

Requirements

DM 21/03/73
DM 26/04/93 N.220
DM 24/09/96 N.572

TESTS CONDITION

Simulators

B
Acetic Acid 3%
(p/v)
in water solution

Ethanol
96%
(v/v)
in water solution

Regulation EU
n°10/2011
Annex III

.....

Time and temperature of contact

2 hours at 70°C
(Standardized test conditions **OM3**)

Regulation EU
n°10/2011
Annex V - Table 3

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TESTS

Standard migration	mg/kg	12,5	6,8	DM 26/04/93 N. 220 Ann. III Sez. 1/B	≤ 60
Migration of:					
• Iron	mg/kg	< 0,01	< 0,01		≤ 48
• Litium	mg/kg	< 0,01	< 0,01	Regulation EU n°10/2011	≤ 0,6
• Barium	mg/kg	< 0,01	< 0,01	Annex II - Point 1	≤ 1,0
• Cobalt	mg/kg	< 0,01	< 0,01		≤ 0,05
• Copper	mg/kg	< 0,5	< 0,5		≤ 5,0
• Manganese	mg/kg	< 0,1	< 0,1		≤ 0,6
• Zinc	mg/kg	< 0,01	< 0,01		≤ 2,5
Migration of primary amines	ppm	0,002	< 0,002	Regulation EU n°10/2011 Annex II - Point 2	≤ 0,02

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TR n° 094-B/2015

Page 2 of 3

T E S T R E P O R T

<u>Sample</u>	<u>Conductive UHMWPE</u>	<u>Test method</u>	<u>Requirements</u> DM 21/03/73 DM 26/04/93 N.220 DM 24/09/96 N.572
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TESTS CONDITION

<u>Simulators</u>	D2 Rectified Olive Oil	Regulation EU n°10/2011 Annex III
<u>Time and temperature of contact</u>	2 hours 70°C (Standardized test conditions OM3)	Regulation EU n°10/2011 Annex V - Table 3

TESTS

<u>Global Migration</u>	mg/kg	< 6	DM 26/04/93 N. 220 Ann. III Sec. 1/B e 1/C	≤ 60
<u>Migration of:</u>				
• Iron	mg/kg	< 0,01		≤ 48
• Litium	mg/kg	< 0,01		≤ 0,6
• Barium	mg/kg	< 0,01		≤ 1,0
• Cobalt	mg/kg	< 0,01	Regulation EU n°10/2011 Annex II - Point 1	≤ 0,05
• Copper	mg/kg	< 0,5		≤ 5,0
• Manganese	mg/kg	< 0,1		≤ 0,6
• Zinc	mg/kg	< 0,01		≤ 2,5
<u>Migration of primary amines</u>	ppm	0,007	Regulation EU n°10/2011 Annex II - Point 2	≤ 0,02



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Page 3 of 3

T E S T R E P O R T

COMMENT

On the basis of the test results and on the basis of the recipe provided by the Customer, we certify that the polyethylene film marked "**Conductive UHMWPE**", **is suitable** with the Requirements of the EU Regulation n°10/2011, **for the contact with the following foods:**

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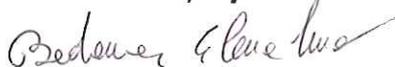
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F. Negrone, **Director**

