

TEST REPORT N° FC200115.02**Date:****12/05/2020****Customer**

HALOPOLYMER PERM JSC
98, LASVINSKAYA STR.
614042 PERM

Sample ID

Fluoroplast F-4

Sampling

by Customer

Arrival Date

20/04/2020

Start test date

24/04/2020

End test date

11/05/2020

PASS/FAIL

PASS according to GB standards 4806.1,6 and 7:2016
and GB 9685:2016 and according to technical GB
standards series 31604:2015

TEST REPORT N° FC200115.02**Date:****12/05/2020**Time: 10 days
Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Overall migration in acetic acid 4% w/V by total immersion - first attack	2,1		mg/dm ²	1	10	GB31604.1:2016 + GB31604.8:2016 (*)	L75	24/04/2020	05/05/2020
Overall migration in ethanol 10% by total immersion - first attack	4,4		mg/dm ²	1	10	GB31604.1:2016 + GB31604.8:2016 (*)	L75	24/04/2020	05/05/2020
Overall migration in olive oil by total immersion - first attack	ND		mg/dm ²	1	10	GB31604.1:2016 + GB31604.8:2016 (*)	L75	24/04/2020	05/05/2020

Time: 10 days
Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Specific migration of primary aromatic amines in acetic acid 4% w/V	ND		mg/kg	0,01	0,01	UNI EN 13130-1:2005 + BVL LFGB §64 L 00.00-6:1995/Cor:2002	L29	24/04/2020	04/05/2020

Time: 10 days
Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Specific Migration of metals in Acetic Acid 4%									
Specific migration of aluminium in acetic acid 4%	0,07		mg/kg	0,01	1	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of barium in acetic acid 4%	ND		mg/kg	0,01	1	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of cobalt in acetic acid 4%	ND		mg/kg	0,01	0,05	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of Iron in acetic acid 4%	ND		mg/kg	0,01	48	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of lithium in acetic acid 4%	ND		mg/kg	0,01	0,6	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of manganese in acetic acid 4%	ND		mg/kg	0,01	0,6	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of nickel in acetic acid 4%	ND		mg/kg	0,01	1	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020
Specific migration of Copper in acetic acid 4%	ND		mg/kg	0,01	5	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020

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PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Specific migration of Zinc in acetic acid 4%	ND		mg/kg	0,01	25	Reg UE 10/2011 14/01/2011 GU UE L12 15/01/2011+ UNI EN 13130-1:2005+UNI EN ISO 11885:2009	L29	24/04/2020	05/05/2020

Time: 2 h

Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Specific Migration of metals in Acetic Acid 4%									
Specific migration of lead in acetic acid 4%	0,02		mg/kg	0,01	1	GB 31604.9 (*)	L29	30/04/2020	30/04/2020

Time: 3 days

Temperature: 20°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Specific migration of tetrafluoroethylene _CAS 116-14-3 in isoctane	ND		mg/kg	0,02	0,05	UNI EN 13130-1:2005 + MHTH026 rev.0 2017 (*)	L30	27/04/2020	30/04/2020

Time: 10 days

Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Sensory inspection									
Colour and Luster	See Note 3					GB 4806.7-2016 (*)	L75	24/04/2020	11/05/2020
Abnormal odour and dirt	See Note 3					GB 4806.7-2016 (*)	L75	24/04/2020	11/05/2020
Soak Solution condition									
Coloration	See Note 3					GB 4806.7-2016 (*)	L75	24/04/2020	11/05/2020
Abnormal Odour	See Note 3					GB 4806.7-2016 (*)	L75	24/04/2020	11/05/2020
Precipitation	See Note 3					GB 4806.7-2016 (*)	L75	24/04/2020	11/05/2020
Turbidity	See Note 3					GB 4806.7-2016 (*)	L75	24/04/2020	11/05/2020

Time: 10 days

Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Decolorization test	A		P/A			GB31604.7 (*)	L75	24/04/2020	04/05/2020

Time: 2 h

Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Potassium Permanganate Consumption	ND		mg/L	1	10	GB31604.2 (*)	L75	30/04/2020	30/04/2020

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Time: 10 days
Temperature: 60°C

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Screening GC/MS of non-volatile substances on ethanol 95%	See Note 1		mg/kg	0,01		MHTH004 rev. 0 2016 (*)	L30	24/04/2020	05/05/2020

PARAMETER	RESULT	UNCERTAINTY	U.M.	LOQ	LIM	METHOD	LAW REFERENCE	START DATE TEST	END DATE TEST
Evaluation of organoleptic inertia (flavour) - No packaging	See Note 2					MHTH010 rev.0 2016 deriv UNI 10192:2000 (*)	L76	28/04/2020	29/04/2020
Evaluation of organoleptic inertia (odour) - No packaging	See Note 2					MHTH010 rev.0 2016 deriv UNI 10192:2000 (*)	L30	28/04/2020	29/04/2020

LAW REFERENCE:

L29 GB 9685 - Appendix C
L30 GB 4806.6-2016
L75 GB 4806.7-2016
L76 GB 4806-1 2016

NOTE:

(*) Those test are not under the Accreditation scope of our Laboratory.

P/A: present/absent. Expression of the result for decolorization test

S/N: 0,6

Note1: The GC/MS screening did not show occurrence of harmful substances for human health.

Note 2: Performed Condition: 24h, 40°C simulants used: water, milk, biscuits, white chocolate and butter; all scores equal to 0; there are no alterations and differences in smell and taste.

Note 3: At the end of the contact period with the specimens, each simulant:

1. did not show any variation of the colour and the luster;
2. did not show any coloration, precipitation or turbidity
3. did not have any strange odour or dirt.

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Chemical determinations: expanded uncertainty is referred to 95% confidence level. Coverage factor $k=2$.

The limit of determination (LOD) results as $1/10LOQ*3$

N.D= less than LOQ (limit of quantification)

The reported results only refer to the tested sample.

u.m. = unit of measurement; unc = uncertainty;

RIS=Result; Lim=limit

S/V = surface/volume

Authorized by

 Technical Manager
END OF THE REPORT

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