

Test Report

No. SHAHG2013543201

Date: 03 Aug 2020

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JIANGSU JIZO MATERIAL TECHNOLOGY CO., LTD.

NO. 22, HAIYING ROAD, BINHAI INDUSTRY PARK, QIDONG CITY, JIANGSU PROVINCE

The following sample(s) was/were submitted and identified on behalf of the clients as : REFRIGERATOR SEALS

SGS Job No. : SHHL2007528627CW - SH
 Date of Sample Received : 17 Jul 2020
 Testing Period : 17 Jul 2020 - 03 Aug 2020
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments -Overall migration	PASS
Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004-Sensorial examination odour and taste test	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments - Specific migration of phthalates	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments-Specific migration of bisphenol A(BPA)	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments -Specific migration of heavy metal	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments - Residual vinyl chloride monomer	PASS
Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments - Phthalates	PASS



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Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Danna Ji

Danna Ji
Approved Signatory

scan to see the report



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description	Material (claimed by the client)
SN1	SHA20-135432.001	Grey soft plastic	PVC

Remarks :

- (1) mg/dm² = milligram per square decimeter
- (2) mg/kg = milligram per kilogram
- (3) °C= degree Celsius
- (4) < = less than
- (5) MDL = Method Detection Limit
- (6) ND = Not Detected (< MDL)

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments -Overall migration

Test Method : With reference to Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex III and Annex V for selection of condition and EN 1186-1:2002 for selection of test methods;
EN 1186-3: 2002 aqueous food simulants by total immersion method.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 001 Overall migration</u>	<u>Conclusion</u>
20% Ethanol (V/V) Aqueous Solution	240.0hr(s)	40°C	10mg/dm ²	3.7mg/dm ²	PASS

Notes :

- (1) Analytical tolerance of aqueous simulants is 2 mg/dm² or 12 mg/kg.
- (2) Test condition & simulant were specified by client.
- (3) The migration results are based on the first migration as per client's request.

Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004-Sensorial examination odour and taste test

Test Method : With reference to DIN 10955: 2004
No. of panelist: 6

<u>Test Item(s)</u>	<u>Limit</u>	<u>001</u>
Test media	-	DW
Test time (hr(s))	-	240
Temperature(°C)	-	40



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Test Item(s)	Limit	001
Sensorial examination odour (Point scale)	2.5	0
Sensorial examination taste (Point scale)	2.5	0
Conclusion		PASS

Notes :

Scale evaluation:

- 0 – no perceptible difference
- 1 – just perceptible difference
- 2 – slight difference
- 3 – marked difference
- 4 – strong difference
- DW= Distilled water

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments - Specific migration of phthalates

Test Method : With reference to EN13130-1:2004; analysis was performed by GC-MS.

Sample 001

Simulant Used : 20% Ethanol (V/V) aqueous solution

Test Condition : 40 °C 240.0 hr(s)

Test Item(s)	CAS NO.	Max. Permissible Limit	Unit	MDL	Test result
Migration times		-	-	-	First
Area/volume		-	dm ² /kg	-	6.0
Benzylbutyl Phthalate(BBP)	85-68-7	30	mg/kg	0.05	ND
Dibutyl Phthalate(DBP)	84-74-2	0.3	mg/kg	0.05	ND
Bis(2-ethylhexyl) Phthalate(DEHP)	117-81-7	1.5	mg/kg	0.05	ND
Diisononyl phthalate + Diisodecyl phthalate (DINP + DIDP)	-	9	mg/kg	0.2	ND
Diallyl Phthalate (DAP)	131-17-9	0.01	mg/kg	0.01	ND
Conclusion					PASS

Notes :

- (1) Test condition & simulant were specified by client.

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments-Specific migration of bisphenol A(BPA)

Test Method : With reference to EN 13130-1: 2004, analysis was performed by HPLC-FLD.



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Sample 001

Simulant Used : 20% Ethanol (V/V) aqueous solution

Test Condition : 40 °C 240.0 hr(s)

<u>Test Item(s)</u>	<u>Max. Permissible</u> <u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>Test result</u>
Migration times	-	-	-	First
Area/volume	-	dm ² /kg	-	6.0
Specific migration of bisphenol A	0.05	mg/kg	0.01	ND
Conclusion				PASS

Notes :

(1) Test condition & simulant were specified by client.

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments -Specific migration of heavy metal

Test Method : With reference to EN13130-1:2004, analysis was performed by ICP-OES.

Sample 001

Simulant Used : 20% Ethanol (V/V) aqueous solution

Test Condition : 40 °C 240.0 hr(s)

<u>Test Item(s)</u>	<u>Max. Permissible</u> <u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>Test result</u>
Migration times	-	-	-	First
Area/volume	-	dm ² /kg	-	6.0
Aluminium(Al)	1	mg/kg	0.1	ND
Barium(Ba)	1	mg/kg	0.25	ND
Cobalt(Co)	0.05	mg/kg	0.01	ND
Copper(Cu)	5	mg/kg	0.25	ND
Iron(Fe)	48	mg/kg	0.25	ND
Lithium(Li)	0.6	mg/kg	0.5	ND
Manganese(Mn)	0.6	mg/kg	0.25	ND
Zinc(Zn)	5	mg/kg	0.5	ND
Nickel(Ni)	0.02	mg/kg	0.02	ND
Conclusion				PASS

Notes :



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(1) Test condition & simulant were specified by client.

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments - Residual vinyl chloride monomer

Test Method : In-house method (SHTC-CHEM-SOP-171-T), analysis was performed by HS-GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Vinyl chloride monomer	1	mg/kg	0.5	ND
Conclusion				PASS

Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments - Phthalates

Test Method : Solvent extraction, analysis was performed by GC-MS.

<u>Test Item(s)</u>	<u>CAS NO.</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Dibutyl Phthalate (DBP)	84-74-2	0.05	%	0.003	ND
Benzylbutyl Phthalate (BBP)	85-68-7	0.1	%	0.003	ND
Bis-(2-ethylhexyl) Phthalate (DEHP)	117-81-7	0.1	%	0.003	ND
Diisononyl Phthalate (DINP)	28553-12-0 /68515-48-0	0.1	%	0.01	ND
Diisodecyl Phthalate (DIDP)	26761-40-0 /68515-49-1	0.1	%	0.01	ND



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Sample photo:



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