

Test Report

No. SHAHG1201328301

Date: 20 Feb 2012

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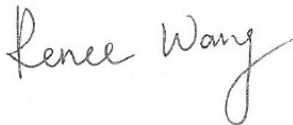
ZHEJIANG TRI-STAR SPECIAL TEXTILE CO.,LTD

WEST INDUSTRY ZONE,SHIFENG ROAD,TIANTAI COUNTY ZHEJIANG PROVINCE,CHINA

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

SGS Job No. : SHHG1202003034SD - SH
Supplier : ZHEJIANG TRI-STAR SPECIAL TEXTILE CO.,LTD
Manufacturer : ZHEJIANG TRI-STAR SPECIAL TEXTILE CO.,LTD
Buyer : PG
PO No. : S187
Country of Origin : CHINA
Country of Destination : GERMANY
Date of Sample Received : 10 Feb 2012
Testing Period : 10 Feb 2012 - 20 Feb 2012
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).
Conclusion : When tested as specified, the tested parameters comply with the permissible safety limit as specified in LFGB, Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intend to come into contact with aqueous foodstuff(pH>4.5), fatty foodstuff.

Signed for and on behalf of
SGS-CSTC Ltd.



Wang Lini, Renee
Approved Signatory

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
1	SHA12-013283.001	White plastic mat with white fibre

Overall migration test

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.

For material: PVC -Overall migration test

Test Method : With reference to EN1186-1:2002 for selection of conditions and test method;
EN1186-3:2002 aqueous food simulants by total immersion method;
EN 1186-14:2002 substitute test

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 001 Overall Migration</u>
Deionized Water	0.5hr	20°C	10 mg/dm ²	<3.0mg/dm ²
95% Ethanol (V/V) Aqueous Solution (Rectified Olive Oil Substitute)	0.5hr	20°C	10 mg/dm ²	<3.0mg/dm ²
Isooctane (Rectified Olive Oil Substitute)	0.5hr	20°C	10 mg/dm ²	4.3mg/dm ²

Notes :

- (1) mg/dm² =milligram per square decimeter
- (2) °C=degree Celsius
- (3) <= less than
- (4) Analytical tolerance of aqueous simulants is 1 mg/dm²
- (5) Analytical tolerance of fatty food simulants is 3 mg/dm²
- (6) Test condition & simulant were specified by client.
- (7) The test data is obtained by considering the articles intended for repeated use as per described in Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex V. Report the 3rd extractive result

Peroxide value

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Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.
For material: PVC -Peroxide value

Test Method : With reference to European pharmacopoeia, 2005 Appendix X F. Peroxide Value method A

<u>Test Item(s)</u>	<u>Limit</u>	<u>001</u>
Peroxide Value	Absent	Absent

Sensorial examination odour and taste test

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and 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 : Sensory test with reference to DIN 10955:1983 (2004).
Odour test condition: 23°C 24 hours;
Taste test condition: 20°C 0.5 hour;
Test media: Distilled water;
No.of panelist: 5

<u>Test Item(s)</u>	<u>Limit</u>	<u>001</u>
Sensorial examination odour (Point scale)	2.5	0
Sensorial examination taste (Point scale)	2.5	0

Notes :

Scale evaluation:

- 0: No perceptible odour
- 1: Odour just perceptible (still difficult to define)
- 2: Moderate odour
- 3: Moderately strong odour
- 4: Strong odour

Specific Migration of Phthalates

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Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.
For material: PVC - Specific migration of phthalate

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

Sample 001

Simulant Used : 95% Ethanol (V/V) Aqueous Solution

Test Condition : 20 °C 0.5 hr

Test Item(s)	Max. Permissible Limit	Unit	MDL	Test Result
Dibutyl Phthalate(DBP)	0.3	mg/kg	0.05	ND
Benzylbutyl Phthalate(BBP)	30	mg/kg	0.25	ND
Di (2-ethylhexyl) Phthalate(DEHP)	1.5	mg/kg	0.25	ND
Diisononyl phthalate + Diisodecyl phthalate (DINP + DIDP)	9	mg/kg	2	ND
Diallyl Phthalate (DAP)	ND	mg/kg	0.01	ND

Sample 001

Simulant Used : Isooctane

Test Condition : 20 °C 0.5 hr

Test Item(s)	Max. Permissible Limit	Unit	MDL	Test Result
Dibutyl Phthalate(DBP)	0.3	mg/kg	0.05	ND
Benzylbutyl Phthalate(BBP)	30	mg/kg	0.25	ND
Di (2-ethylhexyl) Phthalate(DEHP)	1.5	mg/kg	0.25	ND
Diisononyl phthalate + Diisodecyl phthalate (DINP + DIDP)	9	mg/kg	2	ND
Diallyl Phthalate(DAP)	ND	mg/kg	0.01	ND

Notes :

- (1) Test condition & simulant were specified by client.
- (2) 1mg/kg=1ppm=0.0001%
- (3) ND = Not detected
- (4) MDL = Method Detection Limit

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Specific Migration of Heavy Metal

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.

For material: PVC - Specific Migration of Heavy Metal

Test Method : Sample preparation with reference to EN13130-1:2004; analysis was performed by ICP-OES.

Sample 001

Simulant Used : 3% Acetic Acid (W/V) Aqueous Solution

Test Condition : 20 °C 0.5 hr

<u>Test Item(s)</u>	<u>Max. Permissible Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>Test Result</u>
Barium	1	mg/kg	0.25	ND
Cobalt	0.05	mg/kg	0.05	ND
Copper	5	mg/kg	0.25	ND
Iron	48	mg/kg	0.25	ND
Lithium	0.6	mg/kg	0.5	ND
Manganese	0.6	mg/kg	0.25	ND
Zinc	25	mg/kg	0.5	ND

Notes :

- (1) mg/kg = milligram per kilogram
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) Test condition & simulant were specified by client.

Lead(Pb) and Cadmium(Cd)

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.

For material: PVC - Lead(Pb) and Cadmium (Cd)

Test Method : Acidic digestion, analysis was performed by ICP-OES.

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<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Total Lead	Absent	mg/kg	2	ND
Total Cadmium	Absent	mg/kg	2	ND

Notes :

- (1) mg/kg = milligram per kilogram
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)

Vinyl Chloride Monomer (VCM)

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, Commission Regulation (EU) No 10/2011 of 14 January 2011, BfR recommendation and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.

For material: PVC - 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>
VCM(Vinyl Chloride Monomer)	1	mg/kg	0.5	ND

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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

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