



Test Report

Date: APR 14, 2009 Page 1 of 8

The following sample(s) was/were submitted and identified on behalf of the applicant as DC Brushless pump
Client Reference: Style / Item No.: ; Sample Color: Beige; Sample materials: PPS, silicon, stainless steel, nylon, graphite, cuprum, ceramic

SGS Ref No. :
Country of Origin : CHINA

Sample Receiving Date : APR 02, 2009
Testing Period : APR 02, 2009 TO APR 14, 2009

Test Requested : A: In accordance with German Food, Articles of Daily Use and Feed Code of September 1,2005 (LFGB), Section 30 & the general Requirement (Article 3) in EU Regulation (EC) No.1935/2004 on materials and articles intended to come into contact with food.
For material: Metal or metallic coating – Extractable Heavy Metals.
B: To determine the Overall Migration in accordance with Council of Europe Resolution AP(2004)5 relating to silicone rubber materials and articles intended to come into contact with aqueous foodstuffs
C: As specified by client, with reference to European Commission Directive 2007/19/EC (2002/72/EC amendment).
1) For material: Plastics – Overall migration test.
2) For material: PA (Nylon) – Specific migration test of primary aromatic amine content.
D: European Council Directive 84/500/EEC & 2005/31/EC – Ceramic articles intended to come into contact with foodstuffs requirements on lead and cadmium extracted by acetic acid from ceramic surfaces.

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Conclusion : Please refer to next page(s).

Signed for and on behalf of
SGS-CSTC Ltd.

Wang HongLei, Leo
Sr. Engineer

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Test Method : A: Sample preparation in 3% acetic acid at 100°C for 2 hours, followed by analysis using Inductively Coupled Plasma Optical Emission Spectrometer.
B&C1): With reference to EN 1186-1:2002 for selection of conditions and test methods;
EN 1186-3:2002 aqueous food stimulants by total immersion method.
C: 2) With reference to EN1186-1, 3:2002, followed by analysis using UV-Vis Spectrophotometer.
D: As specified in EEC Directive 84/500/EEC & 2005/31/EC.
Analysis was performed by Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES)

Conclusion : A: When tested as specified, the test results of the submitted sample(s) No.1~No.2 are within the limit as stated in the German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 on materials and articles intended to come into contact with food.
B: When tested as specified, the submitted sample(s) No.3 comply with the limit of the overall migration as stated in Council of Europe Resolution AP(2004)5 relating to silicone rubber materials and articles intended to come into contact with aqueous foodstuffs.
C: When tested as specified, the submitted sample(s) No.4~No.6 comply with the requirements stated in European Commission Directive 2007/19/EC (2002/72/EC amendment) relating to plastic materials and articles intended to come into contact with aqueous foodstuffs.
D: When tested as specified, the submitted sample(s) No.7 comply with European Council Directive 84/500/EEC & 2005/31/EC requirements on lead and cadmium extracted by acetic acid from ceramic surfaces.
Hence, the submitted sample(s) comply with the general Requirement (Article 3) in EU Regulation (EC) No.1935/2004 on materials and articles intended to come into contact with aqueous food.

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Results:

A:

Test Item	Result (mg/dm ²)		MDL (mg/dm ²)	Maximum Permissible Limit (mg/dm ²)
	No.1	No.2		
Extractable Lead	N.D.	N.D.	0.001	0.010
Extractable Cadmium	N.D.	N.D.	0.001	0.005
Extractable Nickel	N.D.	N.D.	0.01	0.1
Extractable Chromium	N.D.	N.D.	0.01	0.4
Extractable Copper	N.D.	0.05	0.01	0.5
Extractable Cobalt	N.D.	N.D.	0.01	N.D.
Extractable Antimony	N.D.	N.D.	0.01	N.D.

Note : 1. mg/dm² = milligram per square decimeter
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit

B:

Simulant used	Temperature and condition	Result (mg/dm ²)	Limit (mg/dm ²)
		No.3	
Distilled water	2 hours at 100 °C	< 3	10

Note: 1. mg/dm² = milligram per square decimeter
2. °C = degree Celsius
3. < = less than.

C:

1)

Simulant used	Temperature and condition	Result (mg/dm ²)			Limit (mg/dm ²)
		No.4	No.5	No.6	
Distilled water	2 hours at 100 °C	< 3	3.8	3.7	10

Note: 1. mg/dm² = milligram per square decimeter
2. °C = degree Celsius
3. < = less than.

2)

Test Item	Result(mg/kg)		Maximum Permissible Limit (mg/kg)
	No.5	No.6	
Specific migration of aromatic amine in 3 % acetic acid at 70 °C, 2 hours	< 0.01	< 0.01	0.01

Note : 1. mg/kg = milligram per kilogram of foodstuff in contact with
2. °C = degree Celsius
3. < = less than

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D:
Leachable Lead and Cadmium Content

Category 1

PASS

No.7	Extract Volume (ml)	Lead (mg/dm ²)	Cadmium (mg/dm ²)
1	14	< 0.05	< 0.01
2	14	< 0.05	< 0.01
3	14	< 0.05	< 0.01
4	14	< 0.05	< 0.01
	Limit	0.8	0.07

All results were read directly from ICP.

Remark :
 1. < = Less than
 2. Category 1
 Articles which cannot be filled and articles which can be filled, the internal depth of which does not exceed 25mm.
 Category 2
 All other articles which can be filled.
 Category 3
 Cooking ware; packaging and storage vessels having a capacity of more than three litres.

Specimen Description:

No.1 Silvery metal part
 No.2 Golden metal part
 No.3 Silicone rubber circle
 No.4 Yellow plastic part
 No.5 White plastic part
 No.6 Black plastic part
 No.7 Ceramic bar

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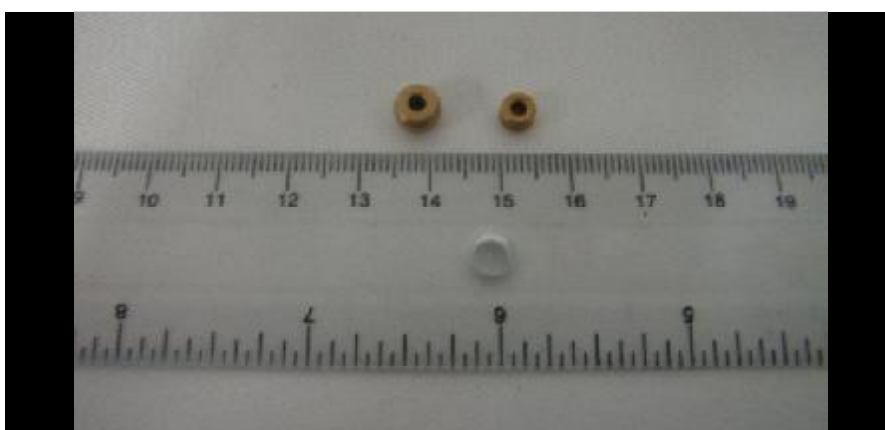
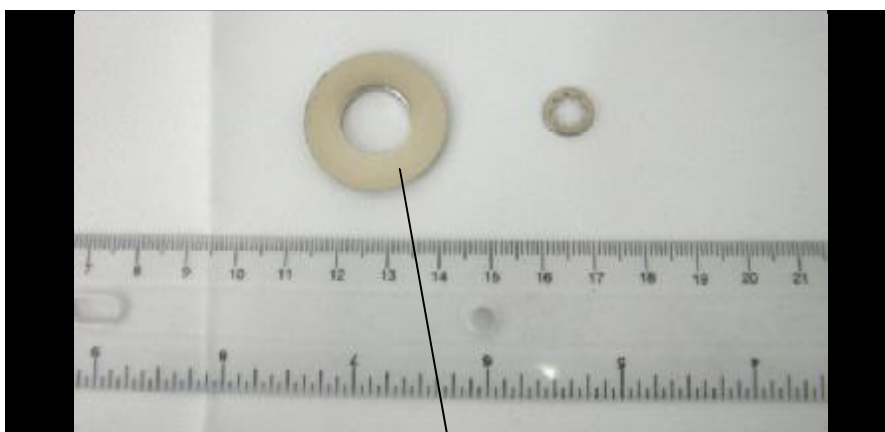


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Sample photos:



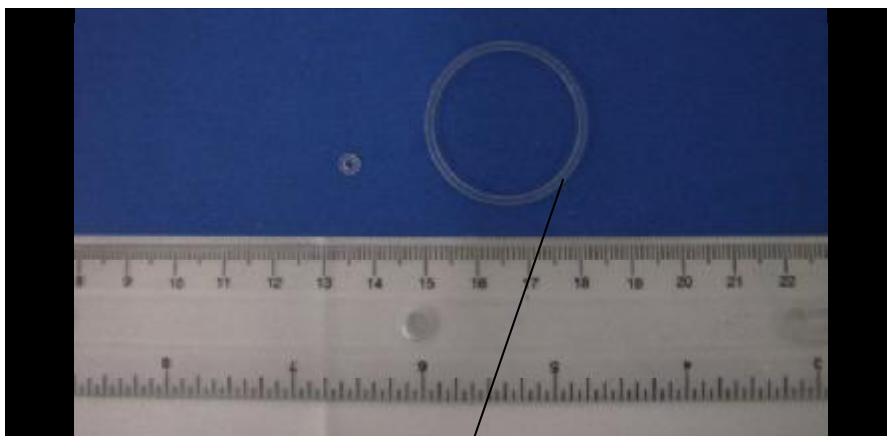
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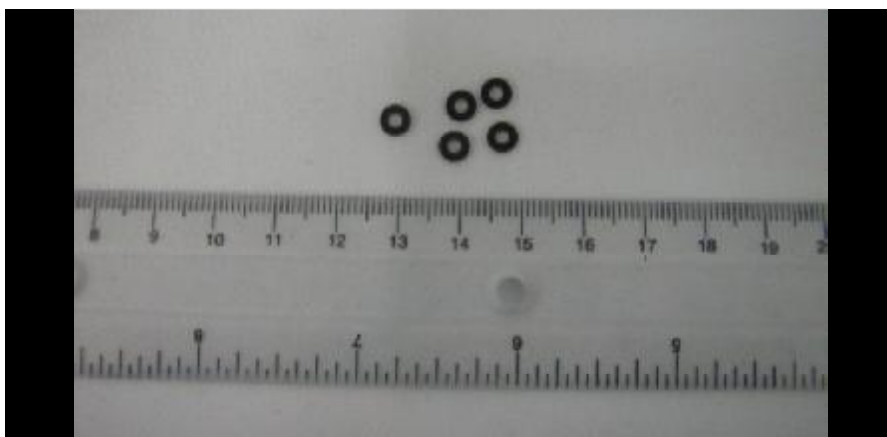
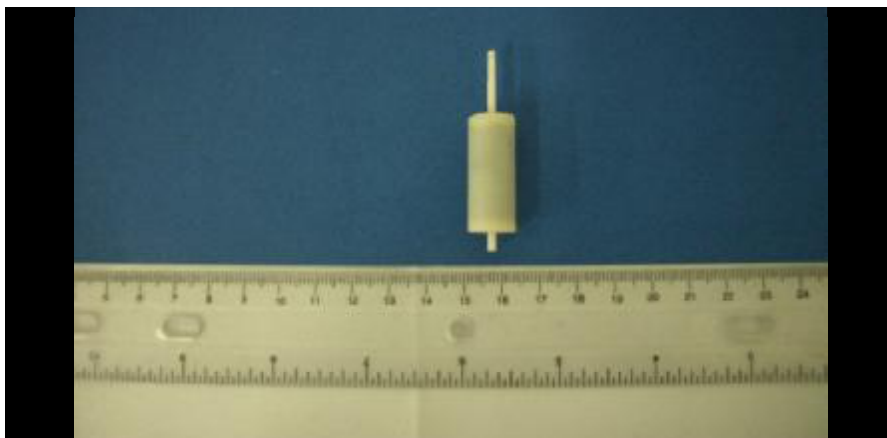


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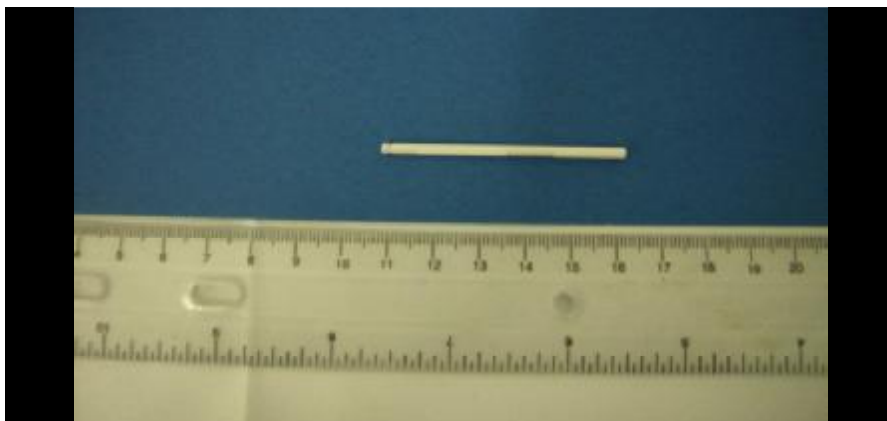
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*** End of Report ***

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