



Test Report

No. CANHG1716962902 A01

Date: 29 Aug 2017

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FFG LIMITED

27F MORRISON PLAZA,5-9 MORRISON HILL ROAD,CAUSEWAYBAY,HONG KONG

This report is to supersede test report CANHG1716962901

The following sample(s) was/were submitted and identified on behalf of the clients as : LEATT TPU WATER BLADDER

SGS Job No. : GZHL1708034390CW - GZ
Date of Sample Received : 08 Aug 2017
Testing Period : 08 Aug 2017 - 14 Aug 2017
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
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendation – Overall migration	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation –Extractable components	PASS
Council of Europe Resolution AP (2004) 5 – Overall migration	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments–Sensorial examination odour and taste test	PASS

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Ivy Ren
Approved Signatory

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description	Material (claimed by the client)
SN1	CAN17-169629.001	Translucent soft sheet(semi-product)	TPU
SN2	CAN17-169629.002	Gray soft part(semi-product)	TPU
SN3	CAN17-169629.003	Gray plastic(semi-product)	POM
SN4	CAN17-169629.004	Gray plastic part(semi-product)	PC
SN5	CAN17-169629.005	Red transparent plastic tube(semi-product)	PVC
SN6	CAN17-169629.006	Gray plastic(semi-product)	PP
SN7	CAN17-169629.007	Gray silicone rubber	Silicone rubber
SN8	CAN17-169629.008	"LEATT TPU WATER BLADDER"	Whole product
SN9	CAN17-169629.009	White plastic(semi-product)	POM
SN10	CAN17-169629.010	Translucent soft part(semi-product)	TPE

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendation – 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; or 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>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 002 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 003 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 004 Overall Migration</u>	<u>Comment</u>
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20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS
<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 005 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS
<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 006 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS
<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 009 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS
<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 010 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS

Notes :

1. mg/dm² = milligram per square decimeter
mg/kg = milligram per kilogram of foodstuff in contact with
2. °C = degree Celsius
3. 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.

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation –Extractable components

Test Method : With reference to 61. Mitteilung über die Untersuchung von Kunststoffen, Bundesgesundheitsbl 46 (2003) 362.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 007</u>	<u>Comment</u>
Distilled water	2.0hr(s)	70°C	0.5%(w/w)	<0.1%(w/w)	PASS

Notes :

%w/w = percentage of weight by weight

Council of Europe Resolution AP (2004) 5 – 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; or 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 007 Overall Migration</u>	<u>Comment</u>
20% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²	PASS

Notes :

1. mg/dm² = milligram per square decimeter
mg/kg = milligram per kilogram of foodstuff in contact with
2. °C = degree Celsius
3. 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.

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments–Sensorial examination odour and taste test

Test Method : With reference to DIN10955:2004,direct contact method.
No.of panelist:6

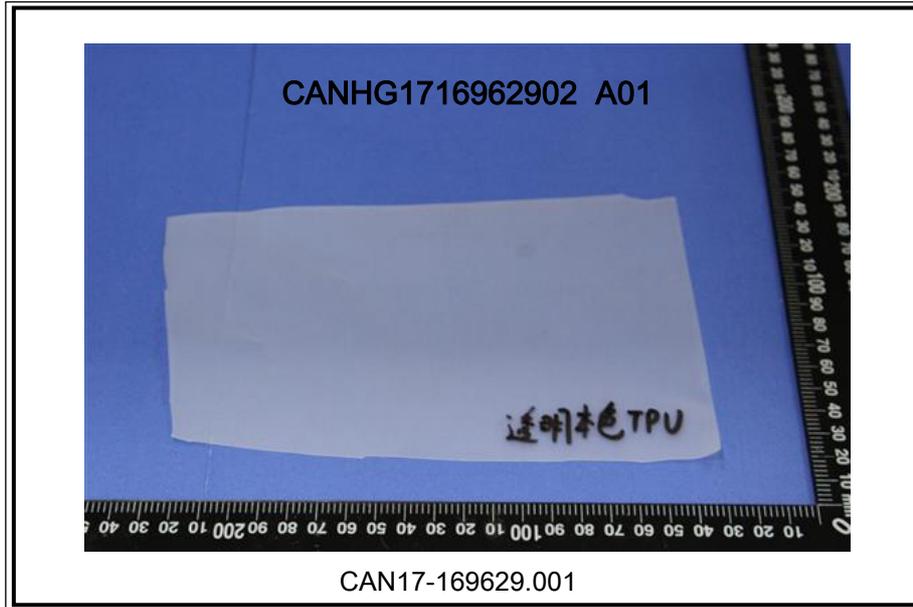
<u>Test Item(s)</u>	<u>Limit</u>	<u>008</u>
Test media	-	Distilled water
Test Temperature (°C)	-	70
Test time (hr)	-	2
Sensorial examination odour (Point scale)	2.5	1.0
Sensorial examination taste (Point scale)	2.5	1.0
Comment		PASS

Notes :

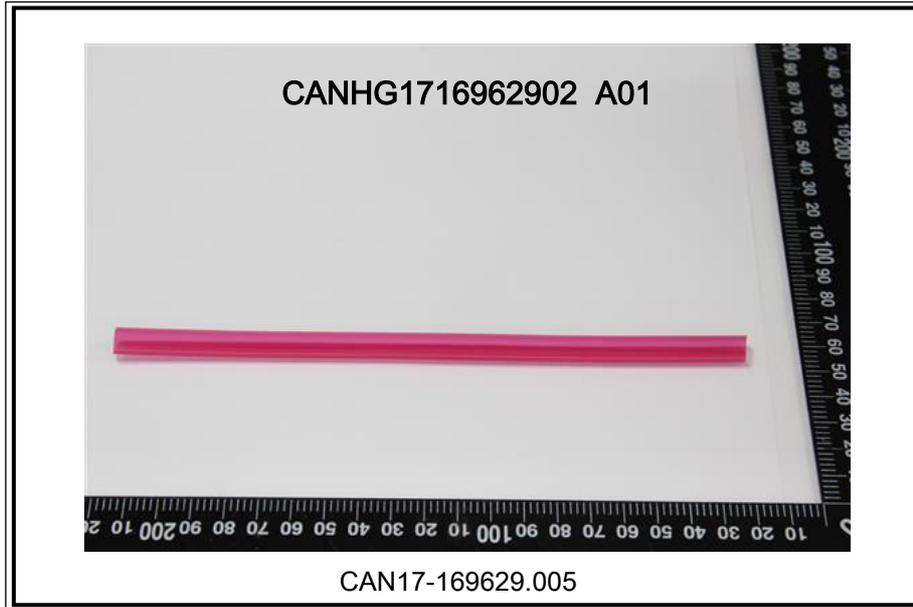
- Intensity scale (rounded at 0.5):
- 0 – no perceptible difference
 - 1 – just perceptible difference
 - 2 – slight difference
 - 3 – marked difference
 - 4 – strong difference

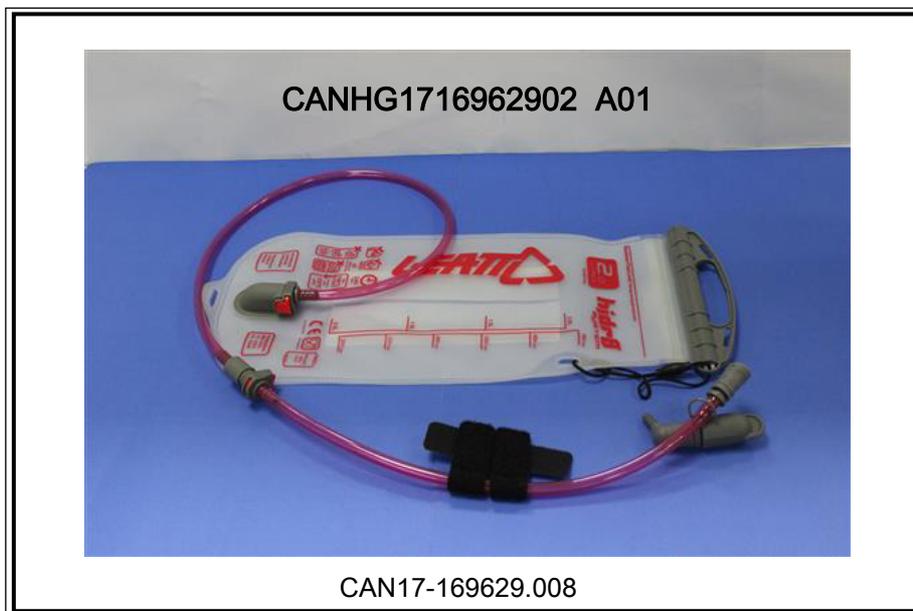
Remark: Results and photo(s) of sample 009-010 in this report refer to test report CANHG1710968501

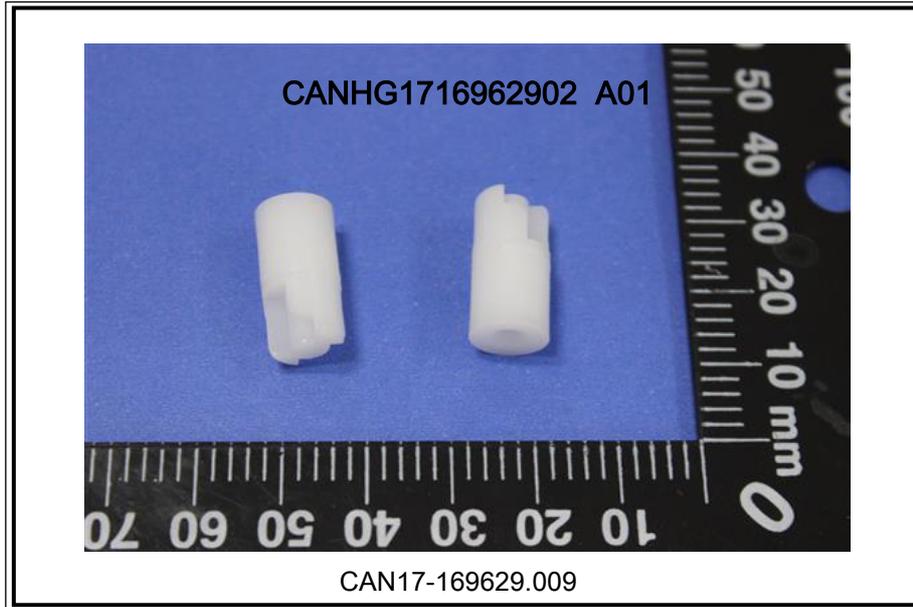
Sample photo:











SGS authenticate the photo on original report only

*** End of Report ***



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FFG LIMITED

27F MORRISON PLAZA,5-9 MORRISON HILL ROAD,CAUSEWAYBAY,HONG KONG

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

SGS Job No. : GZHL1708034388CW - GZ
Date of Sample Received : 08 Aug 2017
Testing Period : 08 Aug 2017 - 15 Aug 2017
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
FDA 21 CFR 175.300–Total extractive residues	See Results
FDA 21 CFR 177.2470–Chloroform-soluble extractive residues	See Results
FDA 21 CFR 177.1580–Total extractive residues	See Results
FDA 21 CFR 177.2600–Total extractive residues	PASS
FDA 21 CFR 177.1975–VCM (Vinyl Chloride Monomer) content	PASS
FDA 21 CFR 177.1520–Density at 23°C	PASS

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Ivy Ren
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description	Material (claimed by the client)
SN1	CAN17-154966.001	Tranlucent soft sheet(semi-product)	TPU
SN2	CAN17-154966.002	Gray soft part(semi-product)	TPU
SN3	CAN17-154966.003	Gray plastic(semi-product)	POM
SN4	CAN17-154966.004	Gray plastic part(semi-product)	PC
SN5	CAN17-154966.005	Red transparent plastic tube	PVC
SN6	CAN17-154966.006	Gray silicone rubber	Silicone rubber
SN7	CAN17-154966.007	White plastic(semi-product)	POM
SN8	CAN17-154966.008	White plastic grains	Polyolefin co-polymer
SN9	CAN17-154966.009	Tranlucent soft part(semi-product)	TPE

FDA 21 CFR 175.300–Total extractive residues

Test Method : With reference to US FDA 21 CFR 175.300.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 005 Total extractive residues</u>	<u>Comment</u>
Distilled Water	---	Fill boiling, cool to 100°F	18mg/sq. in	<1mg/sq. in	PASS

Notes :

mg/inch²= milligram per square inch

FDA 21 CFR 177.2470–Chloroform-soluble extractive residues

Test Method : With reference to US FDA 21 CFR 177.2470.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 003</u>	<u>Comment</u>
Distilled Water	---	Fill boiling, cool to 100	0.5mg/sq. in	<0.2mg/sq. in	PASS

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 007</u>	<u>Comment</u>
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Distilled Water	---	Fill boiling, cool to 100	0.5mg/sq. in	<0.2mg/sq. in	PASS
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Notes :

mg/inch²= milligram per square inch

FDA 21 CFR 177.1580–Total extractive residues

Test Method : With reference to US FDA 21 CFR 177.1580.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 004</u>	<u>Comment</u>
Distilled Water	6hr(s)	Reflux Temperature	0.15%(w/w)	0.02%(w/w)	PASS

Notes :

%w/w= percentage of weight by weight

FDA 21 CFR 177.2600–Total extractive residues

Test Method : With reference to US FDA 21 CFR 177.2600.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 001</u>	<u>Comment</u>
Distilled Water	7.0hr(s)	Reflux temperature	20mg/sq. in	<0.5mg/sq. in	PASS
Succeeding Extraction	2.0hr(s)	Reflux temperature	1mg/sq. in	<0.5mg/sq. in	PASS

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 002</u>	<u>Comment</u>
Distilled Water	7.0hr(s)	Reflux temperature	20mg/sq. in	<0.5mg/sq. in	PASS
Succeeding Extraction	2.0hr(s)	Reflux temperature	1mg/sq. in	<0.5mg/sq. in	PASS

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 006</u>	<u>Comment</u>
Distilled Water	7.0hr(s)	Reflux temperature	20mg/sq. in	<0.5mg/sq. in	PASS
Succeeding Extraction	2.0hr(s)	Reflux temperature	1mg/sq. in	<0.5mg/sq. in	PASS



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No. CANHG1715496601

Date: 15 Aug 2017

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<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 009</u>	<u>Comment</u>
Distilled Water	7.0hr(s)	Reflux temperature	20mg/sq. in	<0.5mg/sq. in	PASS
Succeeding Extraction	2.0hr(s)	Reflux temperature	1mg/sq. in	<0.5mg/sq. in	PASS

Notes :

1.mg/inch²= milligram per square inch

2.For sample 001-002:Limit = Reference limit. The test sample is out of scope of the standard.

FDA 21 CFR 177.1975-VCM (Vinyl Chloride Monomer) content

Test Method : With reference to US FDA 21 CFR 177.1975.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
VCM (Vinyl Chloride Monomer) content	0.01	mg/kg	0.01	ND
Comment				PASS

Notes :

1. mg/kg = milligram per kilogram

2. MDL=Method Detection Limit

3. ND = Not Detected

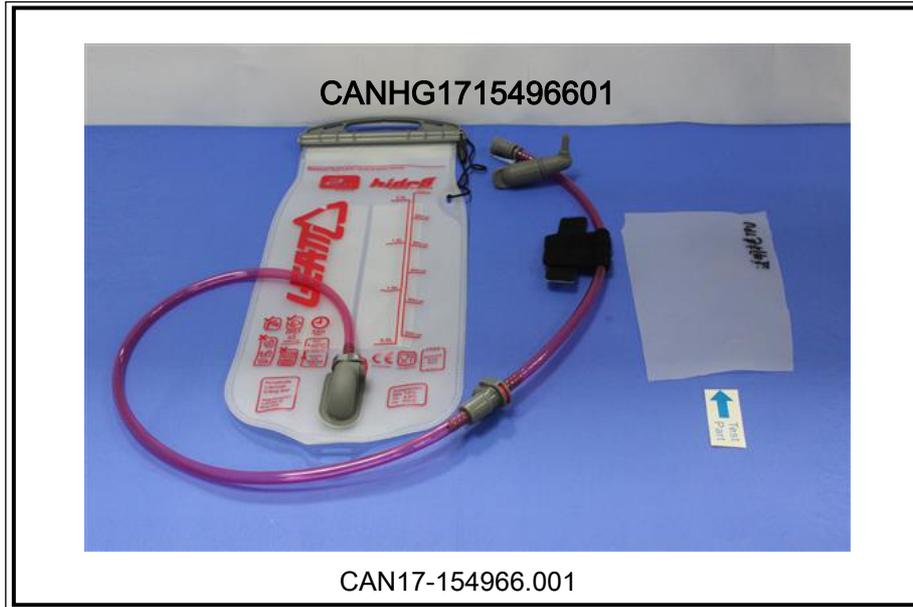
FDA 21 CFR 177.1520-Density at 23°C

Test Method : With reference to US FDA 21 CFR 177.1520 d(1).

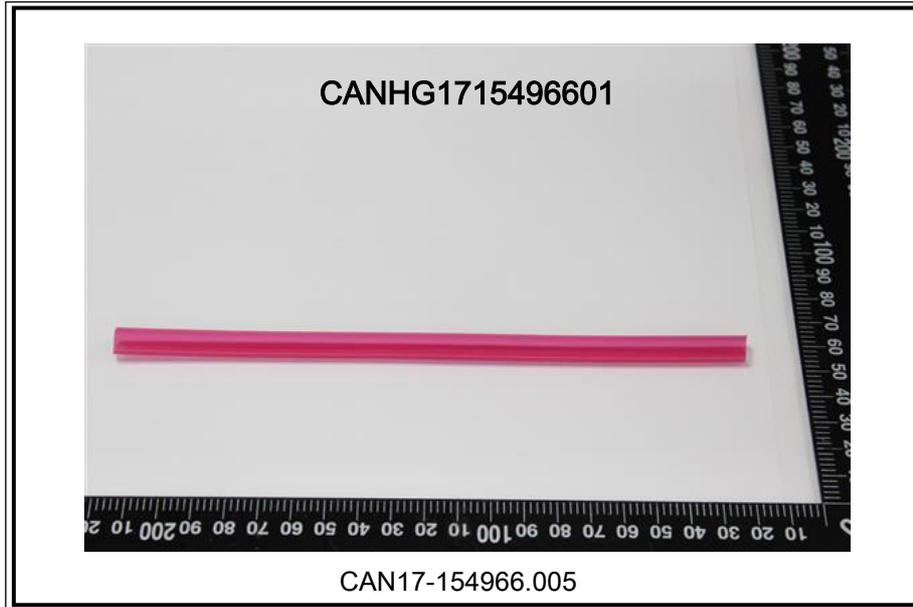
<u>Test Item(s)</u>	<u>Limit</u>	<u>008</u>
Density at 23°C, g/ cm ³	0.850-1.000	0.891
Comment		PASS

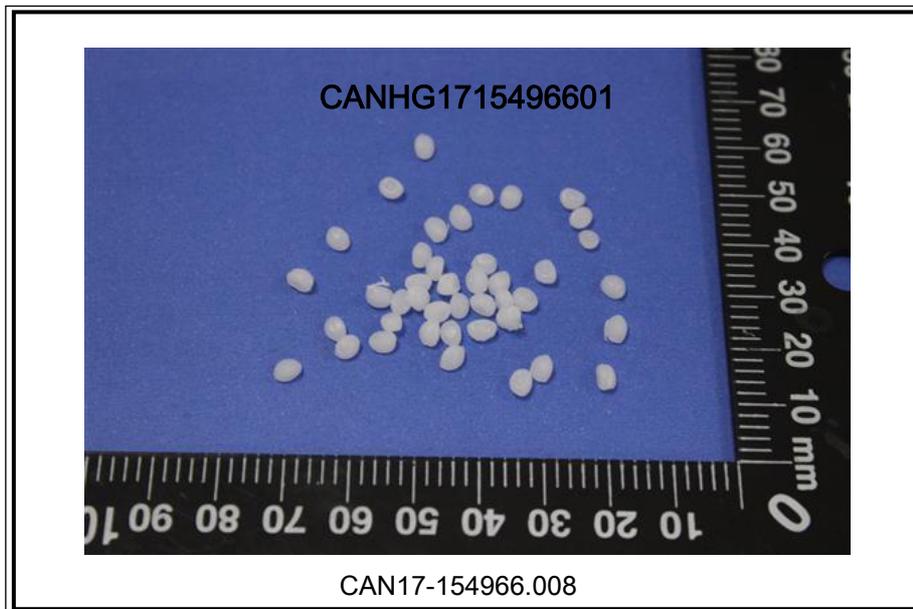
Remark: Results and photo(s) of sample 007-009 in this report refer to test report CANHG1710979601

Sample photo:











SGS authenticate the photo on original report only

*** End of Report ***