



# Test Report

No. F690101/LF-CTSAYAA15-47943R1

Issued Date: 2015. 09. 25

Page 1 of 3

**NPC CO., LTD.**  
289, Haean-ro, Danwon-gu, Ansan-si  
Gyeonggi-do  
Korea

The following sample(s) was/were submitted and identified by/on behalf of the client as:-

**SGS File No.** : AYAA15-47943R1  
**Product Name** : Cup  
**Item No./Part No.** : N/A  
**Received Date** : 2015. 09. 16  
**Test Period** : 2015. 09. 16 to 2015. 09. 25  
**Test Result(s)** : For further details, please refer to following page (s)  
**Supersede/Referral** : The test report supercedes previous report number, "F690101/LF-CTSAYAA15-47943" issued by SGS Korea Co., Ltd.

**Result Summary** :

Test Requested	Conclusion
US FDA 21 CFR 177.1520(Olefin Polymer) (As per client's request)	-
Olefin copolymer	-
a) Density	<b>PASS</b>
b) Extractable fraction	<b>PASS</b>
c) Soluble fraction	<b>PASS</b>

SGS Korea Co., Ltd.

Jeff Jang / Chemical Lab manager

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



# Test Report

No. F690101/LF-CTSAYAA15-47943R1

Issued Date: 2015. 09. 25

Page 2 of 3

Sample No. : AYAA15-47943R1.001

Sample Description : Cup

Item / Part No. : N/A

**Test result(s) :****US FDA 21 CFR 177.1520****Method : With reference to 21 CFR 177.1520(c)(3.1a)****a) Density**

Test Item(s)	Result (g/mL)	Permissible Limit (g/mL)
Density at 23.3 °C	0.89	0.85-1.00
<b>Comment</b>	<b>PASS</b>	-

**b) Extractable fraction**

Sample extracted in n-hexane under the condition of 50 °C for 2 hours.

Test Item(s)	Result (% w/w)	Detection Limit (% w/w)	Permissible Limit (% w/w)
Extractable fraction	1.82	0.1	5.5
<b>Comment</b>	<b>PASS</b>	-	-

**c) Soluble fraction**

Sample dissolved in xylene under the condition of 25 °C for 2 hours.

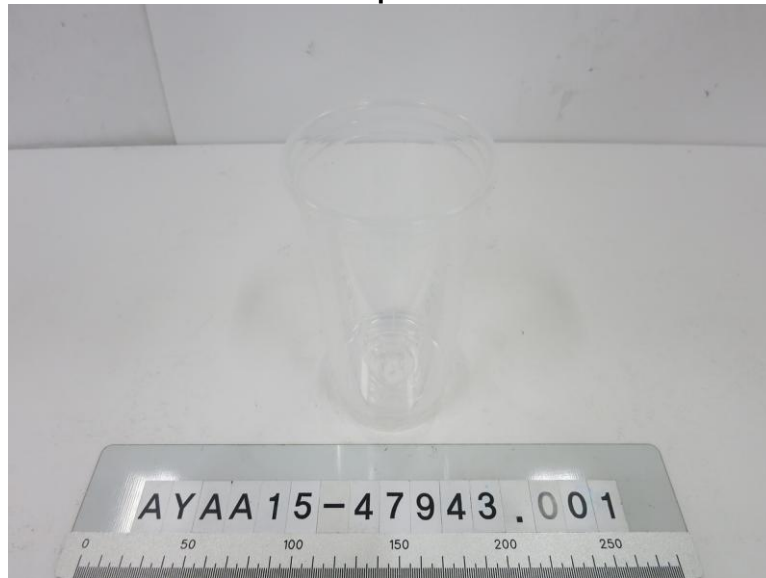
Test Item(s)	Result (% w/w)	Detection Limit (% w/w)	Permissible Limit (% w/w)
Soluble fraction	4.84	0.1	30.0
<b>Comment</b>	<b>PASS</b>	-	-

## NOTE)

1. g/mL = gram per milliliter
2. % w/w = percentage of weight by weight
3. °C = degree Celsius
4. N.D = Not detected

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

Picture of Samples as Received:



\*\*\* End of Report \*\*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



**Test Report** No. F690101/LF-CTSAYAA15-63373R2 Issued Date: 2015. 12. 24 Page 1 of 3

**NPC CO., LTD.**  
289, Haean-ro, Danwon-gu, Ansan-si  
Gyeonggi-do  
Korea

The following sample(s) was/were submitted and identified by/on behalf of the client as:-

**SGS File No.** : AYAA15-63373R2  
**Product Name** : Cap (Elastomer)  
**Item No./Part No.** : N/A  
**Received Date** : 2015. 12. 15  
**Test Period** : 2015. 12. 15 to 2015. 12. 24  
**Test Result(s)** : For further details, please refer to following page (s)  
**Supercede/Referral** : The test report supercedes previous report number, "F690101/LF-CTSAYAA15-63373R1" issued by SGS Korea Co., Ltd.

**Result Summary** :

Test Requested	Conclusion
US FDA 21 CFR 177.2600 (Rubber Articles) Determination of Amount of Extractives (As per client's request)	See result

SGS Korea Co., Ltd.

Jeff Jang / Chemical Lab manager

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



# Test Report

No. F690101/LF-CTSAYAA15-63373R2

Issued Date: 2015. 12. 24

Page 2 of 3

Sample No. : AYAA15-63373R2.001

Sample Description : Cap (Elastomer)

Item / Part No. : N/A

Test Results :

## US FDA 21 CFR 177.2600 (Rubber Articles) – Determination of Amount of Extractives

Method :With reference to US FDA 21 CFR 177.2600.

For use in contact with aqueous food:

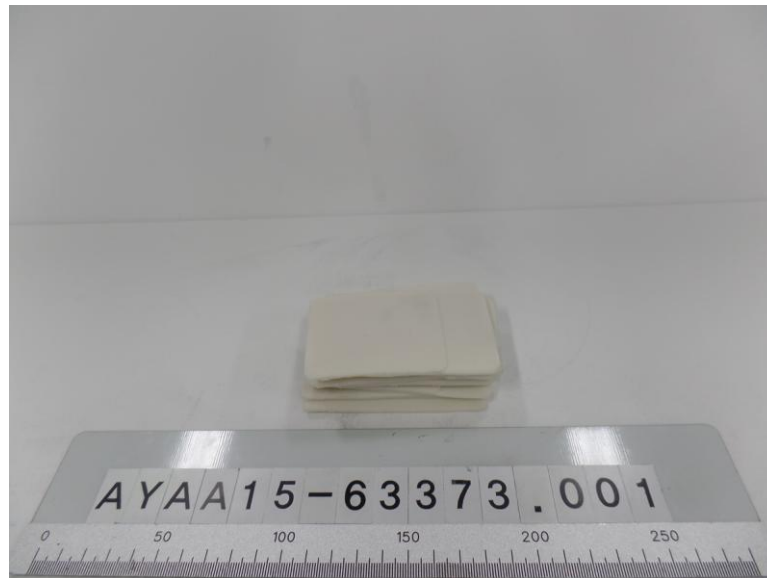
Extractants	Test Condition	Result (mg/inch <sup>2</sup> )	Reporting Limit (mg/inch <sup>2</sup> )	Permissible Limit (mg/inch <sup>2</sup> )
Distilled Water	Reflux temperature for 7 hours	0.97	0.1	20
	Succeeding 2 hours of extraction	N.D	0.1	1
<b>Comment</b>	--	<b>PASS</b>	--	--

Note : 1. mg/inch<sup>2</sup> = milligram per square inch

2. N.D = Not Detected

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

Picture of Sample as Received :



\*\*\* End of Report \*\*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



# Test Report

No. F690101/LF-CTSAYAA15-47941R1

Issued Date: 2015. 09. 25

Page 1 of

**NPC CO., LTD.**  
289, Haean-ro, Danwon-gu, Ansan-si  
Gyeonggi-do  
Korea

The following sample(s) was/were submitted and identified by/on behalf of the client as:-

**SGS File No.** : AYAA15-47941R1  
**Product Name** : Tension  
**Item No./Part No.** : N/A  
**Received Date** : 2015. 09. 16  
**Test Period** : 2015. 09. 16 to 2015. 09. 25  
**Test Result(s)** : For further details, please refer to following page (s)  
**Supersede/Referral** : The test report supercedes previous report number, "F690101/LF-CTSAYAA15-47941" issued by SGS Korea Co., Ltd.

<b>Result Summary</b> :	<b>Test Requested</b>	<b>Conclusion</b>
	<b>US FDA 21 CFR 177.1580 (Polycarbonate Resins) - Determination of Amount of Extractives (As per client's request)</b>	<b>PASS</b>

SGS Korea Co., Ltd.

Jeff Jang / Chemical Lab manager

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



# Test Report

No. F690101/LF-CTSAYAA15-47941R1

Issued Date: 2015. 09. 25

Page 2 of

Sample No. : AYAA15-47941R1.001

Sample Description : Tension

Item / Part No. : N/A

## Test result(s) :

**US FDA 21 CFR177.1580 (Polycarbonate Resins) – Determination of Amount of Extractives**

**Method : With reference to US FDA 21 CFR 177.1580**

Sample extracted at reflux temperature for 6 hours.

Extractants	Result (% w/w)	Detection Limit (% w/w)	Permissible Limit (% w/w)
Distilled Water	0.05	0.02	0.15
50% Alcohol	0.02	0.02	0.15
n-Heptane	0.05	0.02	0.15
<b>Comment</b>	<b>PASS</b>	-	-

Note : 1. g/mL = gram per milliliter

2. % w/w = percentage of weight by weight

3. N.D = Not Detected

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).

F401 Version 2

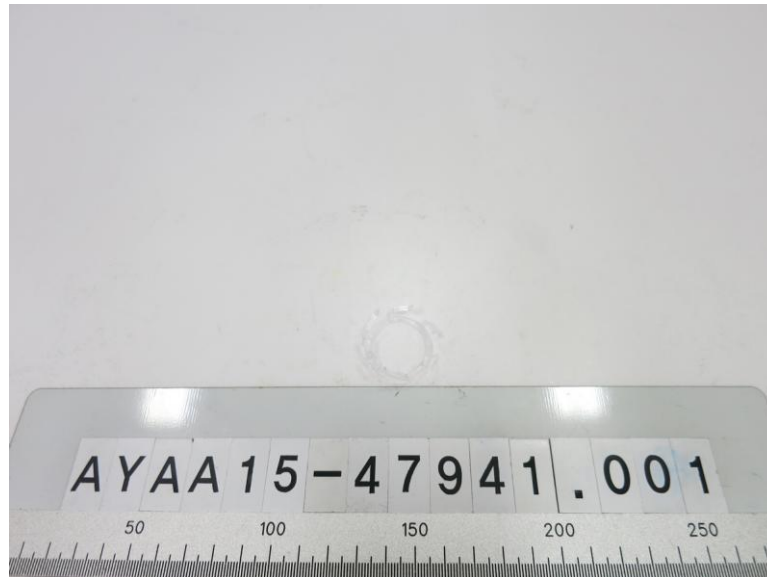
SGS Korea Co., Ltd.

322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117  
t +82 (0)31 4608 000 f +82 (0)31 4608 059 <http://www.sgsgroup.kr>

Member of the SGS Group (Société Générale de Surveillance)



Picture of Sample as Received :



\*\*\* End of Report \*\*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).