

À

**PACKSEVEN INDÚSTRIA E COMÉRCIO LTDA**

Rua Barão de Mauá, 2400 . Distrito Industrial Getúlio Vargas I  
Mogi Guaçu / SP  
CEP: 13.846-300

**N/ REF.: CAN-4792/2015**

Candeias/BA, 07 de julho de 2015

At.: **Sr. Clayton Matheus Alexandre Xavier**


Ref.: **Análise em amostras diversas**

Prezado Senhor,

Anexamos á presente, o original do nosso **Í Relatório de AnálisesÍ**, referente à operação acima.

Agradecemos a V.Sa. á contratação de nossos serviços, e permanecemos ao inteiro dispor para quaisquer outras informações.

Atenciosamente,



**Diego Alves Santos**  
**Intertek do Brasil Inspeções Ltda.**

**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Filme Stretch, Lote 180001-1, Data de Fabricação: 17/06/2015

**I È Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Polybrominated Biphenyls (PBB☉)	-	1000 ppm
Monobromobiphenyl (Mono PBB)	ND	-
Dibromobiphenyl (Di PBB)	ND	-
Tribromobiphenyl (Tri PBB)	ND	-
Tetrabromobiphenyl (Tetra PBB)	ND	-
Pentabromobiphenyl (Penta PBB)	ND	-
Hexabromobiphenyl (Hexa PBB)	ND	-
Heptabromobiphenyl (Hepta PBB)	ND	-
Octabromobiphenyl (Octa PBB)	ND	-
Nonabromobiphenyl (Nona PBB)	ND	-
Decabromobiphenyl (Deca PBB)	ND	-
Polybrominated Diphenyl Ethers (PBDE☉)	-	1000 ppm
Monobromodiphenyl Ether (Mono PBDE)	ND	-
Dibromodiphenyl Ether (Di PBDE)	ND	-
Tribromodiphenyl Ether (Tri PBDE)	ND	-
Tetrabromodiphenyl Ether (Tetra PBDE)	ND	-
Pentabromodiphenyl Ether (Penta PBDE)	ND	-
Hexabromodiphenyl Ether (Hexa PBDE)	ND	-
Heptabromodiphenyl Ether (Hepta PBDE)	ND	-
Octabromodiphenyl Ether (Octa PBDE)	ND	-
Nonabromodiphenyl Ether (Nona PBDE)	ND	-
Decabromodiphenyl Ether (Deca PBDE)	ND	-

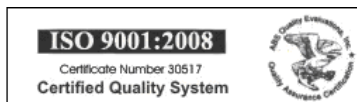
Remarks: ppm = parts per million (mg/kg)  
 ND = Not detected (results below of LDM)  
 # = The limits are according to RoHS Directive 2011/65/EU.



**Diego Alves Santos**  
**CRQ 07402708**

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**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Filme Stretch, Lote 180001-1, Data de Fabricação: 17/06/2015

**I Ë Test result summary:**

<u>Testing item</u>	<u>Results (ppm)</u>	<u>Limits #</u>
	A	
Cadmium (Cd) content	ND	100 ppm
Lead (Pb) content	ND	1000 ppm
Mercury (Hg) content	ND	1000 ppm
Chromium VI (Cr <sup>6+</sup> ) content	2.8	1000 ppm

Remarks: ppm = parts per million (mg/kg)

ND = Not detected

NI = Not informed

# = The limits are according to RoHS Directive 2011/65/EU

**II Ë Test method:**

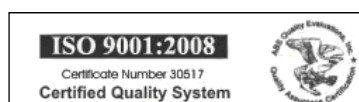
<u>Testing item</u>	<u>Testing method</u>	<u>Reporting limit</u>
Cadmium (Cd) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Lead (Pb) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Mercury (Hg) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	0.5 ppm
Chromium VI (Cr <sup>6+</sup> ) content	With reference to USEPA 3060A & 7196A, by alkaline digestion and determined by UV-Vis	1 ppm
PBB $\text{ç}$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm
PBDE $\text{ç}$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm

Remark: Reporting limit = Quantitation limit of analyte in sample solution

Prepared and checked by: Diego Alves Santos


**Diego Alves Santos**  
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www.intertek.com

### TEST REPORT

**APPLICANT:**

No informed.

**SAMPLE DESCRIPTION:**

One (1) group of submitted samples said to be :

Sample Description : Filme Stretch, Data de Fabricação: 17/06/2015  
Item No. : Lote 180001-1  
Country of Origin : No informed  
Buyer's Name : No informed  
Supplier' Name : Packseven Indústria e Comércio Ltda  
Date sample received : June 30<sup>th</sup>, 2015 at 09:50 h  
Testing period : July 01<sup>st</sup> . 07<sup>th</sup>, 2015 at 14:45 h

**TEST CONDUCTED:**

As requested by the applicant, for details please refer to attached pages. The reported results are only representative of the sample submitted for testing.

**CONCLUSION (Conform RoHS Directive): Conform**

<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
Cadmium (Cd) content	Approved	-	-
Lead (Pb) content	Approved	-	-
Mercury (Hg) content	Approved	-	-
Chromium VI (Cr <sup>6+</sup> ) content	Approved	-	-
PBB $\phi$	Approved	-	-
PBDE $\phi$	Approved	-	-



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**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Smartfilme, Lote 180001-2, Data de Fabricação: 17/06/2015.

**I È Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Polybrominated Biphenyls (PBB☉)	-	1000 ppm
Monobromobiphenyl (Mono PBB)	ND	-
Dibromobiphenyl (Di PBB)	ND	-
Tribromobiphenyl (Tri PBB)	ND	-
Tetrabromobiphenyl (Tetra PBB)	ND	-
Pentabromobiphenyl (Penta PBB)	ND	-
Hexabromobiphenyl (Hexa PBB)	ND	-
Heptabromobiphenyl (Hepta PBB)	ND	-
Octabromobiphenyl (Octa PBB)	ND	-
Nonabromobiphenyl (Nona PBB)	ND	-
Decabromobiphenyl (Deca PBB)	ND	-
Polybrominated Diphenyl Ethers (PBDE☉)	-	1000 ppm
Monobromodiphenyl Ether (Mono PBDE)	ND	-
Dibromodiphenyl Ether (Di PBDE)	ND	-
Tribromodiphenyl Ether (Tri PBDE)	ND	-
Tetrabromodiphenyl Ether (Tetra PBDE)	ND	-
Pentabromodiphenyl Ether (Penta PBDE)	ND	-
Hexabromodiphenyl Ether (Hexa PBDE)	ND	-
Heptabromodiphenyl Ether (Hepta PBDE)	ND	-
Octabromodiphenyl Ether (Octa PBDE)	ND	-
Nonabromodiphenyl Ether (Nona PBDE)	ND	-
Decabromodiphenyl Ether (Deca PBDE)	ND	-

Remarks: ppm = parts per million (mg/kg)

ND = Not detected (results below of LDM)

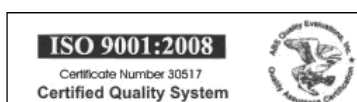
# = The limits are according to RoHS Directive 2011/65/EU.



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**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Smartfilme, Lote 180001-2, Data de Fabricação: 17/06/2015.

**I Ë Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Cadmium (Cd) content	ND	100 ppm
Lead (Pb) content	ND	1000 ppm
Mercury (Hg) content	ND	1000 ppm
Chromium VI (Cr <sup>6+</sup> ) content	1.2	1000 ppm

Remarks: ppm = parts per million (mg/kg)

ND = Not detected

NI = Not informed

# = The limits are according to RoHS Directive 2011/65/EU

**II Ë Test method:**

Testing item	Testing method	Reporting limit
Cadmium (Cd) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Lead (Pb) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Mercury (Hg) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	0.5 ppm
Chromium VI (Cr <sup>6+</sup> ) content	With reference to USEPA 3060A & 7196A, by alkaline digestion and determined by UV-Vis	1 ppm
PBB $\text{\textcircled{C}}$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm
PBDE $\text{\textcircled{C}}$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm

Remark: Reporting limit = Quantitation limit of analyte in sample solution

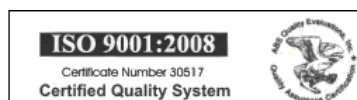
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**TEST REPORT**

**APPLICANT:**

No informed.

**SAMPLE DESCRIPTION:**

One (1) group of submitted samples said to be :

Sample Description : Smartfilme, Data de Fabricação: 17/06/2015

Item No. : Lote 180001-2

Country of Origin : No informed

Buyer's Name : No informed

Supplier' Name : Packseven Indústria e Comércio Ltda

Date sample received : June 30<sup>th</sup>, 2015 at 09:50 h

Testing period : July 01<sup>st</sup> . 07<sup>th</sup>, 2015 at 14:45 h

**TEST CONDUCTED:**

As requested by the applicant, for details please refer to attached pages. The reported results are only representative of the sample submitted for testing.

**CONCLUSION (Conform RoHS Directive): Conform**

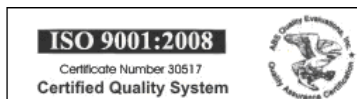
<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
Cadmium (Cd) content	Approved	-	-
Lead (Pb) content	Approved	-	-
Mercury (Hg) content	Approved	-	-
Chromium VI (Cr <sup>6+</sup> ) content	Approved	-	-
PBB $\phi$	Approved	-	-
PBDE $\phi$	Approved	-	-



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**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Filme Liso, Lote 179242-1, Data de Fabricação: 17/06/2015.

**I Ë Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Polybrominated Biphenyls (PBB#)	-	1000 ppm
Monobromobiphenyl (Mono PBB)	ND	-
Dibromobiphenyl (Di PBB)	ND	-
Tribromobiphenyl (Tri PBB)	ND	-
Tetrabromobiphenyl (Tetra PBB)	ND	-
Pentabromobiphenyl (Penta PBB)	ND	-
Hexabromobiphenyl (Hexa PBB)	ND	-
Heptabromobiphenyl (Hepta PBB)	ND	-
Octabromobiphenyl (Octa PBB)	ND	-
Nonabromobiphenyl (Nona PBB)	ND	-
Decabromobiphenyl (Deca PBB)	ND	-
Polybrominated Diphenyl Ethers (PBDE#)	-	1000 ppm
Monobromodiphenyl Ether (Mono PBDE)	ND	-
Dibromodiphenyl Ether (Di PBDE)	ND	-
Tribromodiphenyl Ether (Tri PBDE)	ND	-
Tetrabromodiphenyl Ether (Tetra PBDE)	ND	-
Pentabromodiphenyl Ether (Penta PBDE)	ND	-
Hexabromodiphenyl Ether (Hexa PBDE)	ND	-
Heptabromodiphenyl Ether (Hepta PBDE)	ND	-
Octabromodiphenyl Ether (Octa PBDE)	ND	-
Nonabromodiphenyl Ether (Nona PBDE)	ND	-
Decabromodiphenyl Ether (Deca PBDE)	ND	-

Remarks: ppm = parts per million (mg/kg)

ND = Not detected (results below of LDM)

# = The limits are according to RoHS Directive 2011/65/EU.

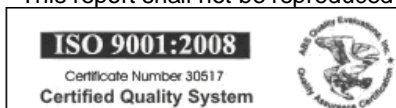


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**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Filme Liso, Lote 179242-1, Data de Fabricação: 17/06/2015.

**I Ë Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Cadmium (Cd) content	ND	100 ppm
Lead (Pb) content	ND	1000 ppm
Mercury (Hg) content	ND	1000 ppm
Chromium VI (Cr <sup>6+</sup> ) content	1.2	1000 ppm

Remarks: ppm = parts per million (mg/kg)

ND = Not detected

NI = Not informed

# = The limits are according to RoHS Directive 2011/65/EU

**II Ë Test method:**

Testing item	Testing method	Reporting limit
Cadmium (Cd) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Lead (Pb) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Mercury (Hg) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	0.5 ppm
Chromium VI (Cr <sup>6+</sup> ) content	With reference to USEPA 3060A & 7196A, by alkaline digestion and determined by UV-Vis	1 ppm
PBB $\phi$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm
PBDE $\phi$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm

Remark: Reporting limit = Quantitation limit of analyte in sample solution

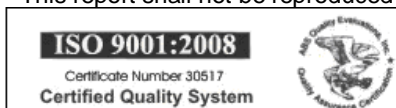
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**TEST REPORT**

**APPLICANT:**

No informed.

**SAMPLE DESCRIPTION:**

One (1) group of submitted samples said to be :  
 Sample Description : Filme Liso, Data de Fabricação: 17/06/2015.  
 Item No. : Lote 179242-1  
 Country of Origin : No informed  
 Buyer's Name : No informed  
 Supplier' Name : Packseven Indústria e Comércio Ltda  
 Date sample received : June 30<sup>th</sup>, 2015 at 09:50 h  
 Testing period : July 01<sup>st</sup> . 07<sup>th</sup>, 2015 at 14:45 h

**TEST CONDUCTED:**

As requested by the applicant, for details please refer to attached pages. The reported results are only representative of the sample submitted for testing.

**CONCLUSION (Conform RoHS Directive): Conform**

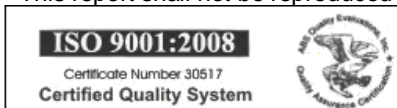
Testing item	Conclusion	Failed component	Failed result
Cadmium (Cd) content	Approved	-	-
Lead (Pb) content	Approved	-	-
Mercury (Hg) content	Approved	-	-
Chromium VI (Cr <sup>6+</sup> ) content	Approved	-	-
PBB $\phi$	Approved	-	-
PBDE $\phi$	Approved	-	-



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**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Filme Impresso, Lote 179775-3, Data de Fabricação: 17/06/2015.

**I Ë Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Polybrominated Biphenyls (PBBç)	-	1000 ppm
Monobromobiphenyl (Mono PBB)	ND	-
Dibromobiphenyl (Di PBB)	ND	-
Tribromobiphenyl (Tri PBB)	ND	-
Tetrabromobiphenyl (Tetra PBB)	ND	-
Pentabromobiphenyl (Penta PBB)	ND	-
Hexabromobiphenyl (Hexa PBB)	ND	-
Heptabromobiphenyl (Hepta PBB)	ND	-
Octabromobiphenyl (Octa PBB)	ND	-
Nonabromobiphenyl (Nona PBB)	ND	-
Decabromobiphenyl (Deca PBB)	ND	-
Polybrominated Diphenyl Ethers (PBDEç)	-	1000 ppm
Monobromodiphenyl Ether (Mono PBDE)	ND	-
Dibromodiphenyl Ether (Di PBDE)	ND	-
Tribromodiphenyl Ether (Tri PBDE)	ND	-
Tetrabromodiphenyl Ether (Tetra PBDE)	ND	-
Pentabromodiphenyl Ether (Penta PBDE)	ND	-
Hexabromodiphenyl Ether (Hexa PBDE)	ND	-
Heptabromodiphenyl Ether (Hepta PBDE)	ND	-
Octabromodiphenyl Ether (Octa PBDE)	ND	-
Nonabromodiphenyl Ether (Nona PBDE)	ND	-
Decabromodiphenyl Ether (Deca PBDE)	ND	-

Remarks: ppm = parts per million (mg/kg)

ND = Not detected (results below of LDM)

# = The limits are according to RoHS Directive 2011/65/EU.

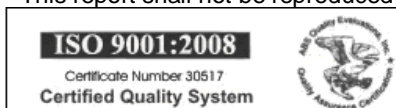


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 www.intertek.com

**TEST CONDUCTED:**

One (1) group of submitted samples said to be:

A : Filme Impresso, Lote 179775-3, Data de Fabricação: 17/06/2015.

**I Ë Test result summary:**

Testing item	Results (ppm)	Limits #
	A	
Cadmium (Cd) content	ND	100 ppm
Lead (Pb) content	ND	1000 ppm
Mercury (Hg) content	ND	1000 ppm
Chromium VI (Cr <sup>6+</sup> ) content	3.7	1000 ppm

Remarks: ppm = parts per million (mg/kg)

ND = Not detected

NI = Not informed


# = The limits are according to RoHS Directive 2011/65/EU

**II Ë Test method:**

Testing item	Testing method	Reporting limit
Cadmium (Cd) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Lead (Pb) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	1 ppm
Mercury (Hg) content	With reference to USEPA 3052 or DIS 2320, by mineral acids digestion and determined by ICP-OES	0.5 ppm
Chromium VI (Cr <sup>6+</sup> ) content	With reference to USEPA 3060A & 7196A, by alkaline digestion and determined by UV-Vis	1 ppm
PBB $\phi$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm
PBDE $\phi$	With reference to USEPA 3540C, by solvent extraction and determined by GC-MSD	2 ppm

Remark: Reporting limit = Quantitation limit of analyte in sample solution

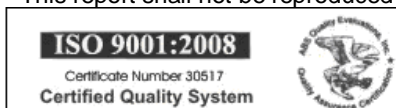
Prepared and checked by: Diego Alves Santos



**Diego Alves Santos**  
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 www.intertek.com

**TEST REPORT**

**APPLICANT:**

No informed.

**SAMPLE DESCRIPTION:**

One (1) group of submitted samples said to be :

Sample Description : Filme Impresso, Data de Fabricação: 17/06/2015.

Item No. : Lote 179775-3

Country of Origin : No informed

Buyer's Name : No informed

Supplier' Name : Packseven Indústria e Comércio Ltda

Date sample received : June 30<sup>th</sup>, 2015 at 09:50 h

Testing period : July 01<sup>st</sup> . 07<sup>th</sup>, 2015 at 14:45 h

**TEST CONDUCTED:**

As requested by the applicant, for details please refer to attached pages. The reported results are only representative of the sample submitted for testing.

**CONCLUSION (Conform RoHS Directive): Conform**

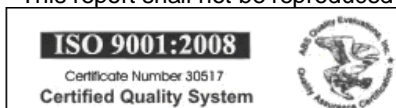
<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
Cadmium (Cd) content	Approved	-	-
Lead (Pb) content	Approved	-	-
Mercury (Hg) content	Approved	-	-
Chromium VI (Cr <sup>6+</sup> ) content	Approved	-	-
PBB $\text{§}$	Approved	-	-
PBDE $\text{§}$	Approved	-	-



**Diego Alves Santos**  
**CRQ 07402708**

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**TEST CONDUCTED**

(A) Detailed test information:

**1. Test for Cd/Pb/Hg/contents**Sample preparation:

1.0 g sample is digested in acid solvents. If insoluble precipitates are produced, dissolve samples totally by taking appropriate digestion reagent. Transfer the digestive solution into a 25 mL volumetric flask. Make up with deionized water.

Analysis:

Analyze Cd, Pb and Hg contents by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) or similar equipment.

ICP condition:

<u>Element</u>	<u>Wavelength (nm)</u>	<u>Gas for plasma</u>
Cd	228,802	Argon
Pb	220,353	Argon
Hg	194,164	Argon

**2. Test for Chromium (VI) content**Sample preparation:

2.5 g samples are placed in Erlenmeyer flask. Add digestion solution and heating at hot plate. Adjust the pH of the solution to  $7.5 \pm 0.5$  and transfer the solution to volumetric flask. Make up with deionized water. Add diphenylcarbazide solution into extract. Adjust the pH of the solution to  $2.0 \pm 0.5$  and make up with deionized water.

Analysis:

Analyze the mixture by using UV-VIS spectrophotometer with wavelength set at 540 nm.

**3. Test for PBBB/PBDEB contents**Sample preparation:

2 g samples are extracted by Soxhlet extraction with dichloromethane/methanol solvents for 16 hours. Reduce the extract to about 5 mL. Transfer the extract into a 25mL volumetric flask and make up with methanol.

Analysis:

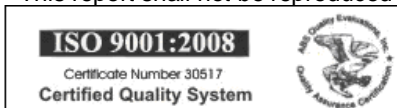
Analyze by Gas Chromatography-Mass Selective Detector (GC-MSD).



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**TEST CONDUCTED**

(B) Detailed test information:

**1. Test for Cd/Pb/Hg/contents**

Sample preparation:

1.0 g sample is digested in acid solvents. If insoluble precipitates are produced, dissolve samples totally by taking appropriate digestion reagent. Transfer the digestive solution into a 25 mL volumetric flask. Make up with deionized water.

Analysis:

Analyze Cd, Pb and Hg contents by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) or similar equipment.

ICP condition:

<u>Element</u>	<u>Wavelength (nm)</u>	<u>Gas for plasma</u>
Cd	228,802	Argon
Pb	220,353	Argon
Hg	194,164	Argon

**2. Test for Chromium (VI) content**

Sample preparation:

2.5 g samples are placed in Erlenmeyer flask. Add digestion solution and heating at hot plate. Adjust the pH of the solution to 7.5±0.5 and transfer the solution to volumetric flask. Make up with deionized water. Add diphenylcarbazide solution into extract. Adjust the pH of the solution to 2.0±0.5 and make up with deionized water.

Analysis:

Analyze the mixture by using UV-VIS spectrophotometer with wavelength set at 540 nm.

**3. Test for PBBs/PBDEs contents**

Sample preparation:

2 g samples are extracted by Soxhlet extraction with dichloromethane/methanol solvents for 16 hours. Reduce the extract to about 5 mL. Transfer the extract into a 25mL volumetric flask and make up with methanol.

Analysis:

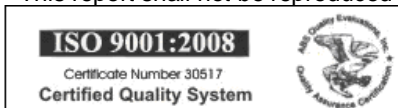
Analyze by Gas Chromatography-Mass Selective Detector (GC-MSD).



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4. **Quality Control:**

Calibration curve

Each test needs to have new calibration on the day it was run. At least 3 points calibration is used for routine analysis. The correlation coefficient of the calibration curve ( $r^2$ ) should be greater than 0.995%.

Method blank

Method blank is analyzed per batch of samples. The method blank value should be less than 10% of the reporting limit.

Duplicate Analysis

Duplicate analysis should be performed at least per batch of samples. The acceptance limit of duplicate analysis is normally set at  $\pm 10\%$ .

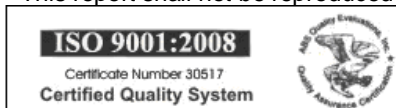
Spike Analysis

Spike analysis is performed for each batch of samples. The recovery of the spike standard should be within 80-120%.



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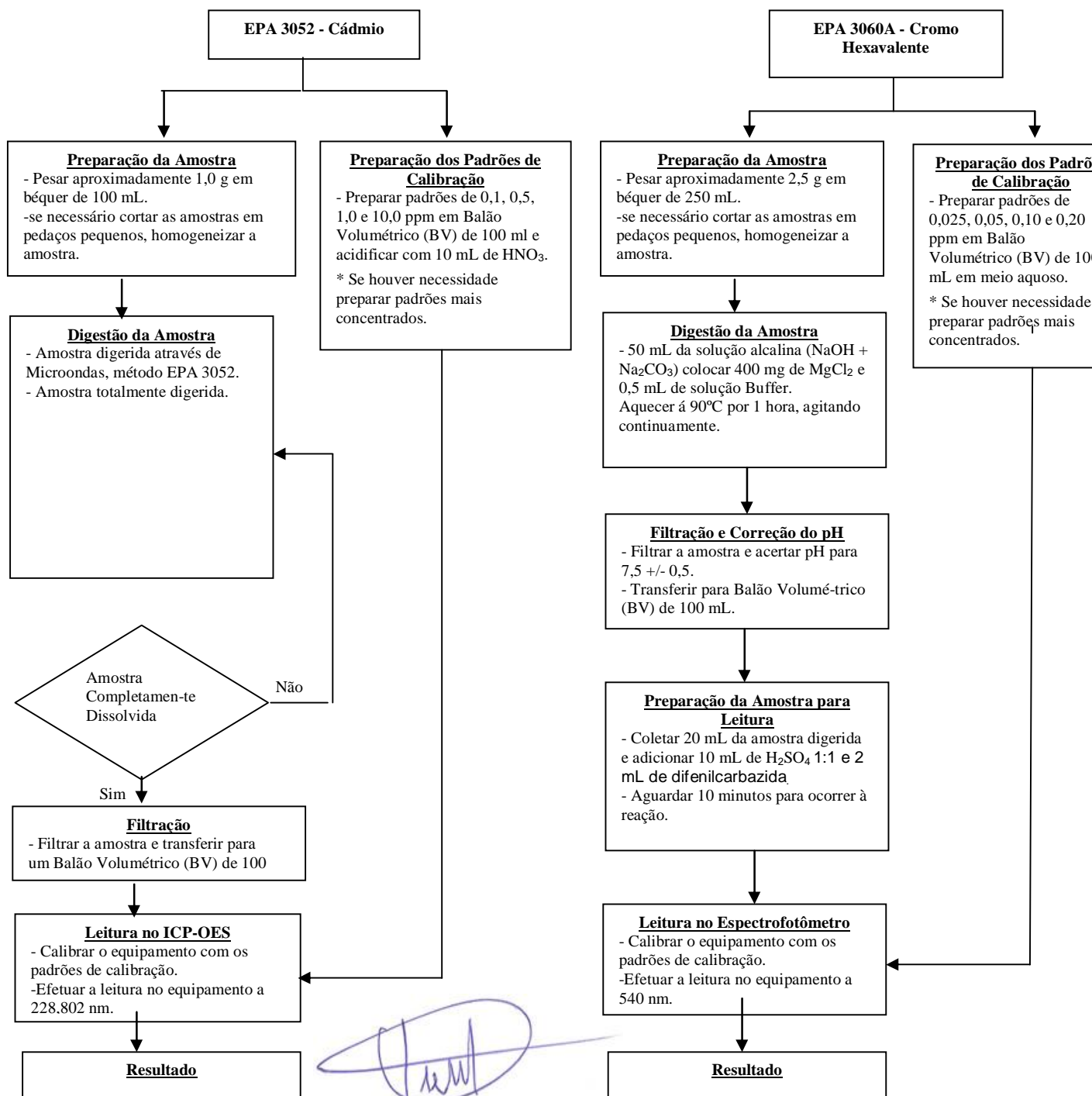
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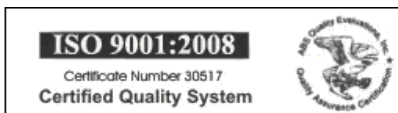
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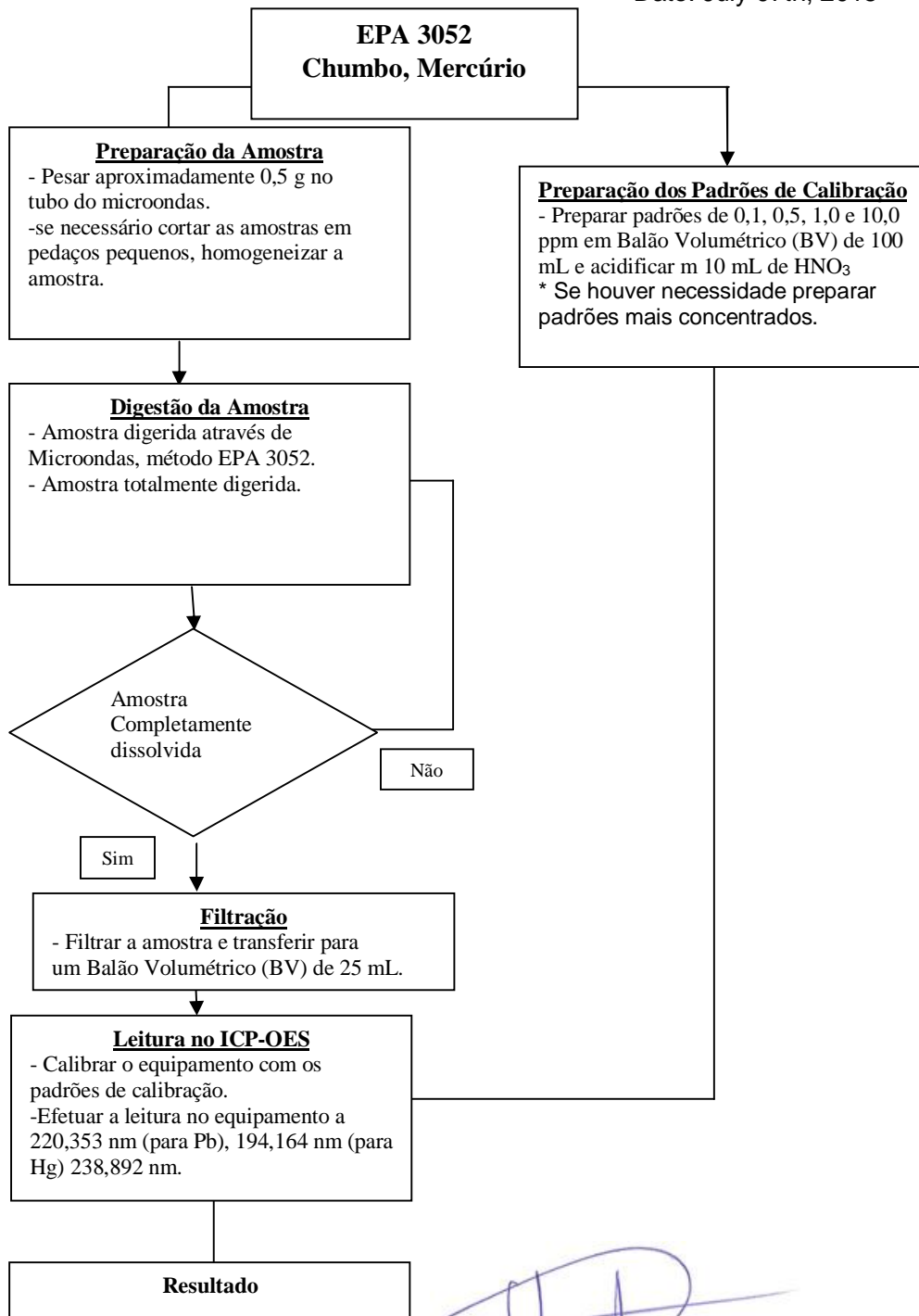




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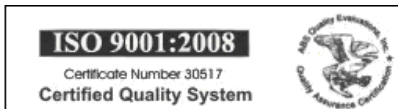




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