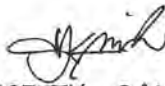




ICP Test Report Certification Packet

Company name: Littelfuse, Inc.
Product Series: Low Profile Minifuse
Product #: 891xxx Series
Issue Date: July 27, 2011

It is hereby certified by Littelfuse, Inc. that there is neither RoHS (EU Directive 2002/95/EC)-restricted substance nor such use, for materials to be used for unit parts, for packing/package materials, and for additives and the like in the manufacturing processes. In addition, it is hereby reported to you that the parts and sub-materials, the materials to be used for unit parts, the packing/package materials, and the additives and the like in the manufacturing processes, are all composed of the following components.

Issued by: 
KRISTEEN BACILA

<Global EHS Engineer>

(1) Parts, sub-materials and unit parts
This document covers the Low Profile Minifuse RoHS-Compliant series products manufactured by Littelfuse, Inc.

< Raw Materials Used
Please see Table 1

(2) The ICP data on all measurable substances
Please see appropriate pages as identified in Table 1

Remarks :



Table 1: List of Raw Materials covered by this report

Total Parts	Raw Material Part Number	Raw Material Description	Page(s)
1	955418-002	Element- Sn Plated Strip	3-11
2	955418-001	Element- Ag Plated Strip	3-11
3	425498	Colorant- Hot Stamp Foil	12-16
4	057882	Colorant-Natural	17-22
5	057877	Colorant-Tan	23-27
6	057348	Housing	28-36
7	057883	Colorant - Green	37-41
8	057878	Colorant-Brown	42-47
9	057881	Colorant-Yellow	48-52
10	057879	Colorant-Red	53-58
11	057880	Colorant-Blue	59-67



RESULTS REPORT

INTERTEK TESTING SERVICES

DE MEXICO SA DE CV

LABORATORIO CD. DE MEXICO

DELIVER TO:

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38,
Piedras Negras, Coahuila

ATTENTION: Ing. Mario Falcón



Report No.: MX10-2137
Date : 2010-10-11



TEST REPORT

APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Ing. Mario Falcón

SAMPLE DESCRIPTION

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

Sample Description Serie 891
 1) N/P: 425 498
Item No. 2) N/P: 955418-001
 3) N/P: 955418-002

Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2010-09-27
Testing period 2010-09-28 to 2010-10-06

TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

CONCLUSION

Sample Number	Testing item	Conclusion	Failed component	Failed result
1	N/P: 425 498	Pass See Result summary	---	---
2	N/P: 955418-001	Pass See Result summary	---	---
3	N/P: 955418-002	Pass See Result summary	---	---

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ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

www.intertek.com



Report No.: MX10-2137
Date : 2010-10-11



TEST CONDUCTED

Samples:

- 1) N/P: 425 498
- 2) N/P: 955418-001
- 3) N/P: 955418-002

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	O RESULT (ppm)			Limit
	(1)	(2)	(3)	
Cadmium (Cd) content	ND	2,858	3,333	0,01% (100 ppm)
Lead (Pb) content	ND	14,29	16,70	0,1% (1000 ppm)
Mercury (Hg) content	ND	ND	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	ND	ND	0,1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs) Total	ND	---	---	0,1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	---	---	---
Dibromobiphenyl (DiBB)	ND	---	---	---
Tribromobiphenyl (TriBB)	ND	---	---	---
Tetrabromobiphenyl (TetraBB)	ND	---	---	---
Pentabromobiphenyl (PentaBB)	ND	---	---	---
Hexabromobiphenyl (HexaBB)	ND	---	---	---
Heptabromobiphenyl (HeptaBB)	ND	---	---	---
Octabromobiphenyl (OctaBB)	ND	---	---	---
Nonabromobiphenyl (NonaBB)	ND	---	---	---
Decabromobiphenyl (DecaBB)	ND	---	---	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs) Total	ND	---	---	0,1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	---	---	---
Dibromodiphenyl (DiBDE)	ND	---	---	---
Tribromodiphenyl (TriBDE)	ND	---	---	---
Tetrabromodiphenyl (TetraBDE)	ND	---	---	---
Pentabromodiphenyl (PentaBDE)	ND	---	---	---
Hexabromodiphenyl (HexaBDE)	ND	---	---	---
Heptabromodiphenyl (HeptaBDE)	ND	---	---	---
Octabromodiphenyl (OctaBDE)	ND	---	---	---
Nonabromodiphenyl (NonaBDE)	ND	---	---	---
Decabromodiphenyl (DecaBDE)	ND	---	---	---

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1ª. Emisión Junio 2005, 1ª Revisión Junio 26, 2009.

ILTA/003/GENS-F8



Report No.: MX10-2137
Date : 2010-10-11



ppm = parts per million based on dry weight of sample.
 $\mu\text{g}/\text{cm}^2$ = microgram per square centimeter.
 $\text{mg}/\text{kg WITH } 50\text{cm}^2$ = milligram per kilogram with 50 square centimeter.
< = less than.

ND = Not detected.

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

These Accreditations only apply for the methods listed in such. Not accredited under EMA Ω .

Prepared and checked by :

For Intertek

Irma Lopez Al
[Signature]
Co'd de area

Laboratory Manager

The Official Mexican Standard NOM-008-SCFI-1993 establishes like separator decimal the comma (,).

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-2137-01 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-2137-02 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-2137-03 WERE TESTED TOGETHER.

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1ª. Emisión Junio 2005, 1ª Revisión Junio 26, 2009.

ILTA003/GENS-F8

OR



Report No.: MX10-2137

Date : 2010-10-11

**Test method :**

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1-3	Chromium VI (Cr ⁶⁺) content	With reference to USEPA 3060, by EPA 7196	QHU2010-45p4	2010-10-06	MELA	20,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	POLYBROMINATE D BIPHENYLS (PBBs)	Determined by GC-MSD	2010-004777	2010-10-01	▲ CONT	50,0
1	POLYBROMINATE D DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2010-004777	2010-10-01	▲ CONT	50,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Lead (Pb) content	With reference to USEPA 3052, by EPA 6010	MET2010-32p93	2010-09-28	DCL,JMR	5,0
2	Lead (Pb) content	With reference to USEPA 3050MOD, by EPA 6010	MET2010-32p94	2010-09-29	DCL,JMR	5,0
3	Lead (Pb) content	With reference to USEPA 3050MOD, by EPA 6010	MET2010-32p94	2010-09-29	DCL,JMR	5,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Cadmium (Cd) content	With reference to USEPA 3052, by EPA 6010	MET2010-32p93	2010-09-28	DCL,JMR	2,0
2	Cadmium (Cd) content	With reference to USEPA 3050MOD, by EPA 6010	MET2010-32p94	2010-09-29	DCL,JMR	2,0
3	Cadmium (Cd) content	With reference to USEPA 3050MOD, by EPA 6010	MET2010-32p94	2010-09-29	DCL,JMR	2,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-32p97	2010-09-29	RNC,UBM	0,25
2	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-32p96	2010-10-01	RNC,UBM	0,25
3	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-32p96	2010-10-01	RNC,UBM	0,25

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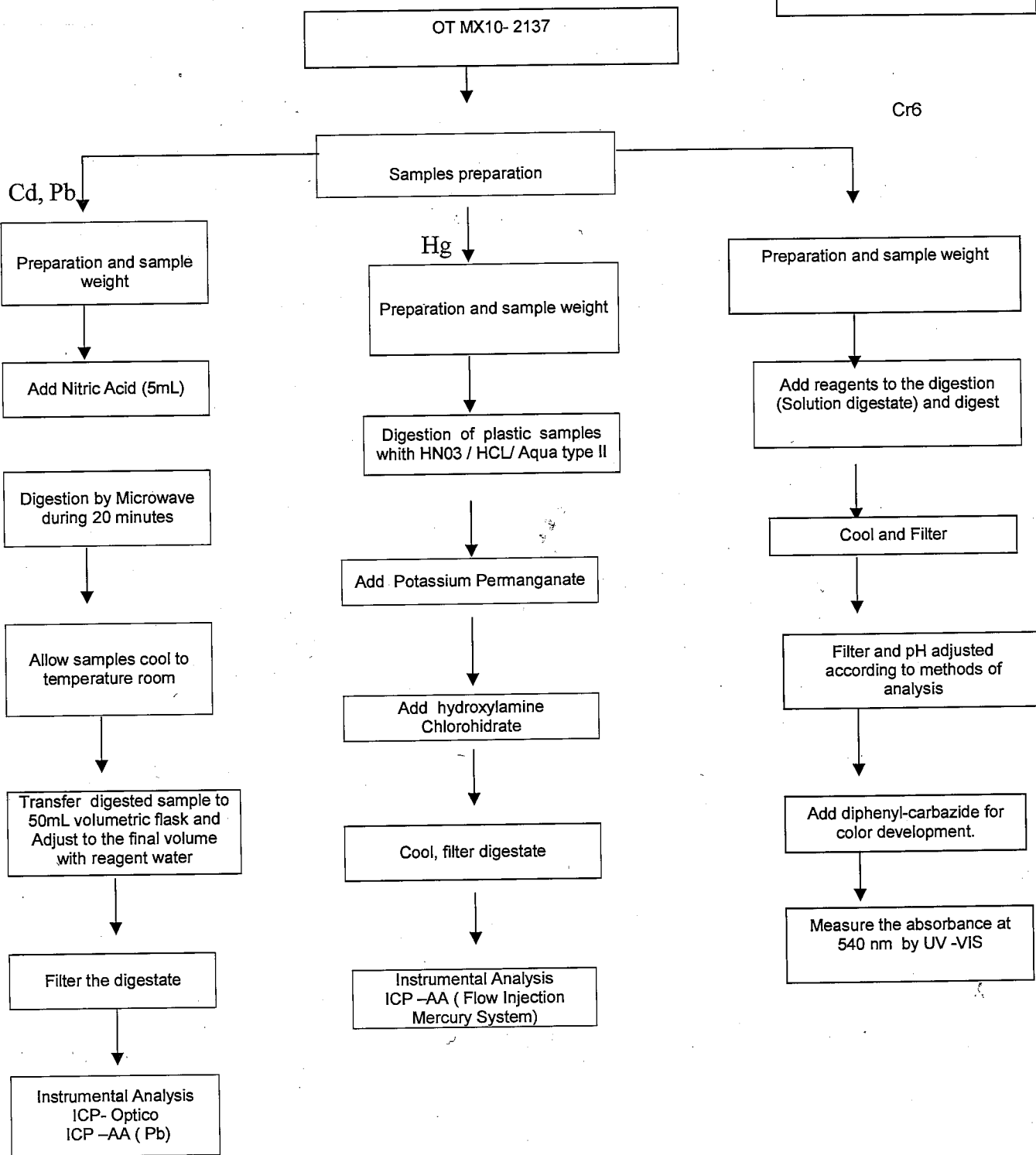
1*. Emisión Junio 2005, 1* Revisión Junio 26, 2009.

ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

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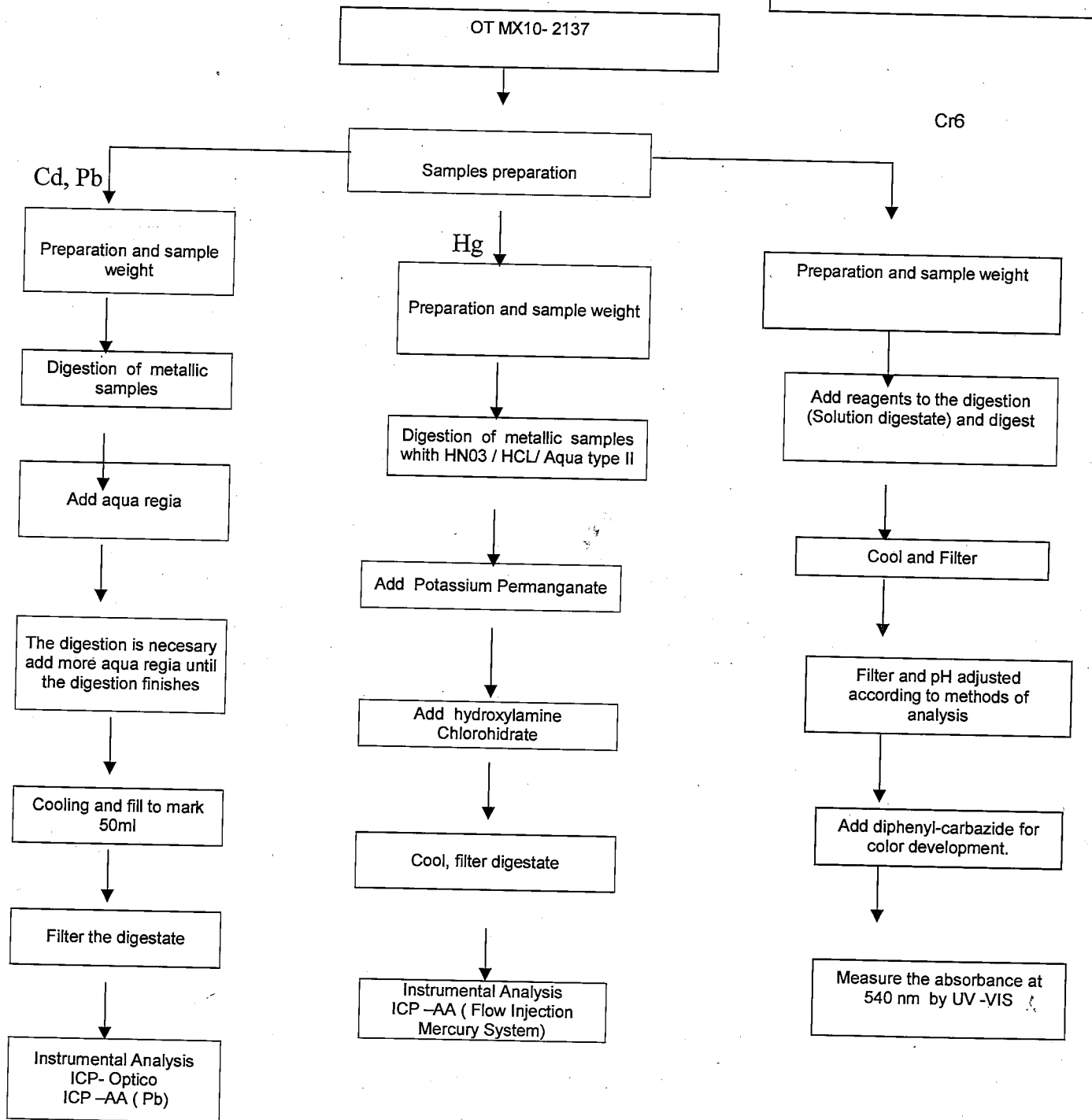
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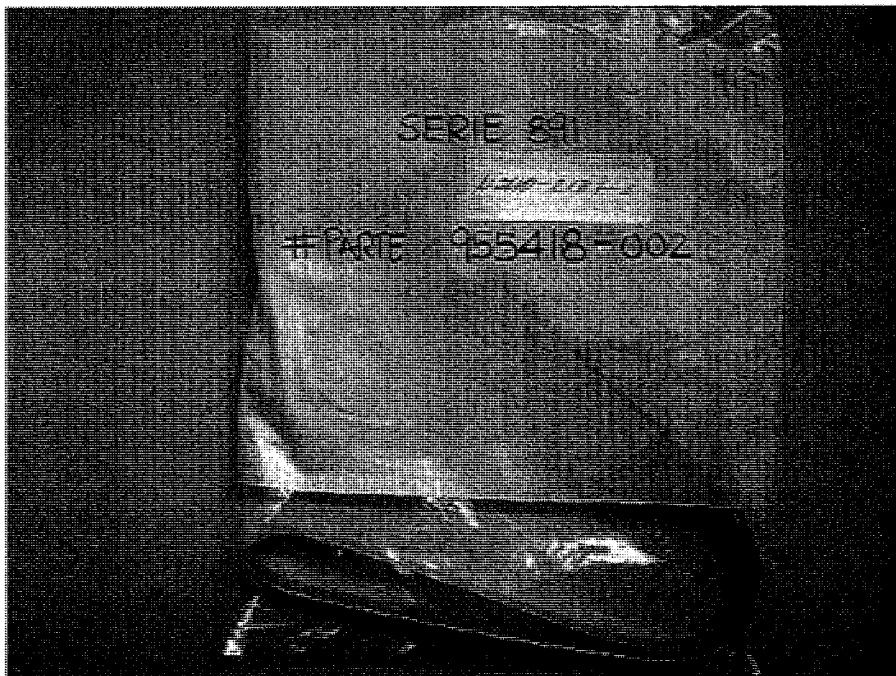
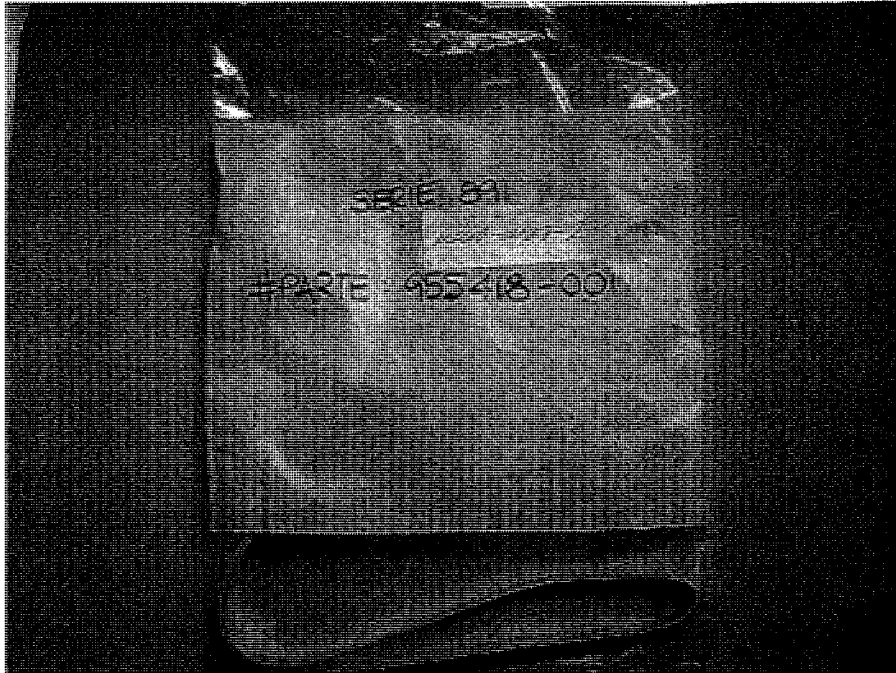
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MX10-2137



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Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300 Del. Azcapotzalco, México, D.F. Tel.: 50912150
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RESULTS REPORT

INTERTEK TESTING SERVICES

DE MEXICO SA DE CV

LABORATORIO CD. DE MEXICO

DELIVER TO:

Littelfuse, S.A. de C.V.

Bvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38,
Piedras Negras, Coahuila

ATTENTION: **Ing. María Valdez**



Report No.: MX11-1039-01
Date : 2011-06-15

TEST REPORT

APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Ing. María Valdez

SAMPLE DESCRIPTION

One (1) group of submitted samples said to be :
Sample Description Series: 297,495,891,995,257,287,997
Item No. 1) N/P 425498 Hot Sample foil White
Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2011-05-19
Testing period 2011-05-23 to 2011-06-09

TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

CONCLUSION

<u>Sample Number</u>	<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
1	N/P 425498 Hot Sample foil White	Pass See Result summary	---	---

TEST CONDUCTED

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Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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Samples:

- 1) N/P 425498 Hot Sample foil White

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)	Limit
	(1)	
Cadmium (Cd) content	ND	0,01% (100 ppm)
Lead (Pb) content	ND	0,1% (1000 ppm)
Mercury (Hg) content	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	0,1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs) Total	ND	0,1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	---
Dibromobiphenyl (DiBB)	ND	---
Tribromobiphenyl (TriBB)	ND	---
Tetrabromobiphenyl (TetraBB)	ND	---
Pentabromobiphenyl (PentaBB)	ND	---
Hexabromobiphenyl (HexaBB)	ND	---
Heptabromobiphenyl (HeptaBB)	ND	---
Octabromobiphenyl (OctaBB)	ND	---
Nonabromobiphenyl (NonaBB)	ND	---
Decabromobiphenyl (DecaBB)	ND	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs) Total	ND	0,1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	---
Dibromodiphenyl (DiBDE)	ND	---
Tribromodiphenyl (TriBDE)	ND	---
Tetrabromodiphenyl (TetraBDE)	ND	---
Pentabromodiphenyl (PentaBDE)	ND	---
Hexabromodiphenyl (HexaBDE)	ND	---
Heptabromodiphenyl (HeptaBDE)	ND	---
Octabromodiphenyl (OctaBDE)	ND	---
Nonabromodiphenyl (NonaBDE)	ND	---
Decabromodiphenyl (DecaBDE)	ND	---

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ppm = parts per million based on dry weight of sample.

$\mu\text{g}/\text{cm}^2$ = microgram per square centimeter.

mg/kg WITH 50cm^2 = milligram per kilogram with 50 square centimeter.

< = less than.

ND = Not detected.

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

These Accreditations only apply for the methods listed in such. Not accredited under EMA Ω .

Prepared and checked by :

For Intertek

Laboratory Manager

The Official Mexican Standard NOM-008-SCFI-1993 establishes like separator decimal the comma (,).

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-1039-01 WERE TESTED TOGETHER.

Test method :

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ILTA/003/GENS-F8

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Poniente 134 No. 660, Col. Industrial Vallejo

C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Chromium VI (Cr ⁶⁺) content	With reference to USEPA 3060, by EPA 7196	QHU2010-61p76,78	2011-05-26	MELA	20,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	POLYBROMINATE D BIPHENYLS (PBBs)	Determined by GC-MSD	2011-000307-PCL	2011-06-09	▲ CONT	50,0
1	POLYBROMINATE D DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2011-000307-PCL	2011-06-09	▲ CONT	50,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Lead (Pb) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p143	2011-05-26	MARY	5,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Cadmium (Cd) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p143	2011-05-26	MARY	2,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-03p138	2010-05-23	RNC	0,25

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Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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Test Report

Number : TWNC00211849

Applicant: Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martinez #1800
Col. Magisterio Seccion 38 C.P.
26070 Piedra Negras, Coahuila,
Mexico

Date : Jun 23, 2011

Sample Description:

One (1) group of submitted samples said to be :
Part Description : COLOR CONCENTRATE NATURAL
Part Number : 057882
Date Sample Received : Jun 21, 2011
Date Test Started : Jun 21, 2011

Test Conducted :

As requested by the applicant, for details please refer to attached pages.

Authorized By:
On Behalf Of Intertek Testing Services
Taiwan Limited



K. Y. Liang
Director

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except in full, without the written
approval of the laboratory.



Number : TWNC00211849

Test Conducted

(I) Test Result Summary :

Test Item	Result (ppm)
	Light Brown plastic Pellets
Heavy Metal	
Cadmium (Cd) content	ND
Lead (Pb) content	ND
Mercury (Hg) content	ND
Chromium VI (Cr ⁶⁺) content	ND
Polybrominated Biphenyls (PBBs)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND
Halogen Content	
Fluorine (F)	ND
Chlorine (Cl)	ND
Bromine (Br)	ND
Iodine (I)	ND

Remarks: ppm = Parts per million based on weight of tested sample = mg/kg
ND = Not detected

Responsibility Of Chemist : Irene Chiou / Kevin Liu / Cathy Chen

Date Sample Received : Jun 21, 2011

Test Period : Jun 21, 2011 To Jun 23, 2011



Number : TWNC00211849

Test Conducted

(II) RoHS Requirement:

<u>Restricted Substances</u>	<u>Limits</u>
Cadmium (Cd) Content	0.01% (100ppm)
Lead (Pb) Content	0.1% (1000ppm)
Mercury (Hg) Content	0.1% (1000ppm)
Chromium VI (Cr ⁶⁺) Content	0.1% (1000ppm)
Polybrominated Biphenyls (PBBs)	0.1% (1000ppm)
Polybrominated Diphenyl Ehters (PBDEs)	0.1% (1000ppm)

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

(III) Test Method:

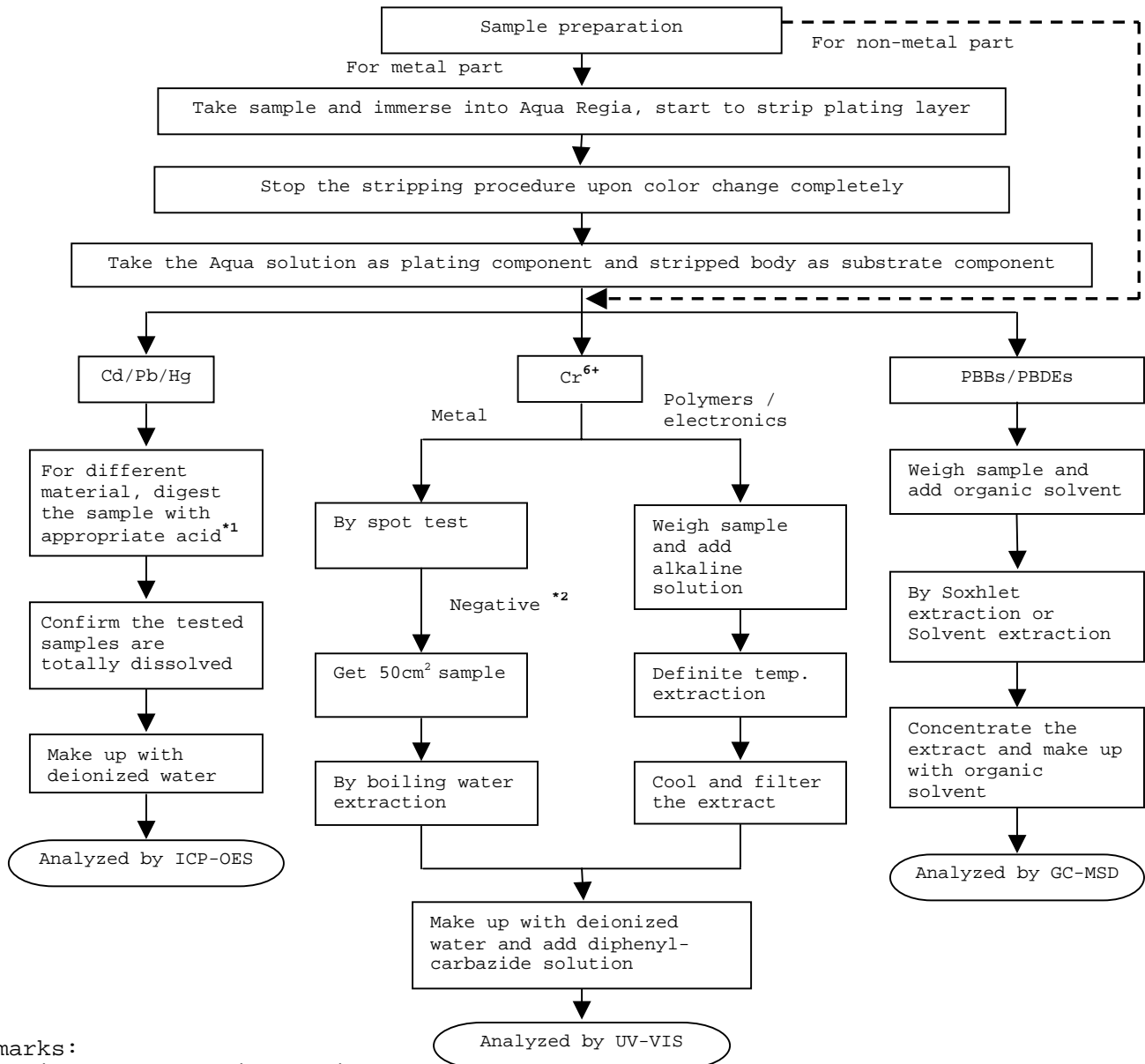
<u>Test Item</u>	<u>Test Method</u>	<u>Reporting Limit</u>
Cadmium (Cd) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Lead (Pb) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Mercury (Hg) content	With reference to IEC 62321 edition 1.0:2008 in clause 7, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Chromium VI (Cr ⁶⁺) content	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer.	1 ppm
Polybrominated Biphenyls (PBBs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm
Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm
Halogen Content	With reference to EN 14582:2007 by calorimetric bomb with oxygen and determined by ion chromatography	50 ppm

Remark: Reporting limit = Quantitation limit of analyte in sample

Test Conducted

(IV) Measurement Flowchart:

Test For Cd/Pb/Hg/Chromium (VI)/PBBS/PBDES Contents
Reference Standard: IEC 62321 edition 1.0:2008



Remarks:

*1: List Of Appropriate Acid:

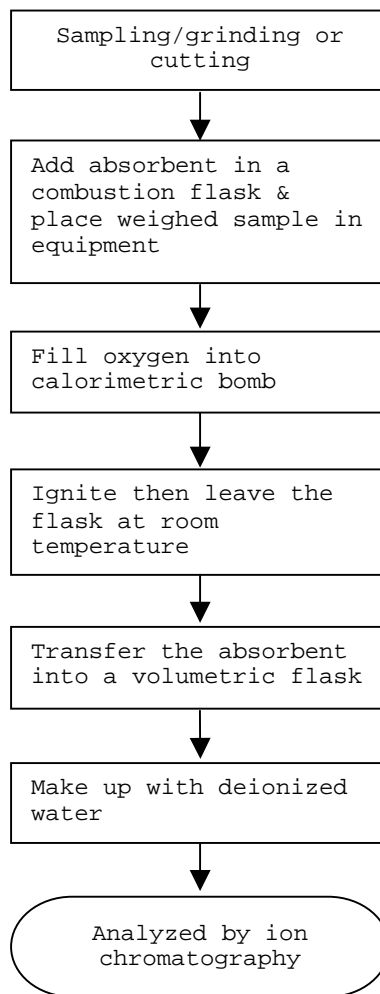
Material	Acid Added For Digestion
Polymers	HNO ₃ , HCl, HF, H ₂ O ₂ , H ₃ BO ₃
Metals	HNO ₃ , HCl, HF
Electronics	HNO ₃ , HCl, H ₂ O ₂ , HBF ₄

*2: If the result of spot test is positive, Chromium VI would be determined as detected.

Test Conducted

(IV) Measurement Flowchart:

Test For Halogen Content
Reference Standard : EN 14582



End Of Report

Test Conducted

Photo



RESULTS REPORT

INTERTEK TESTING SERVICES

DE MEXICO SA DE CV

LABORATORIO CD. DE MEXICO

DELIVER TO:

Littelfuse, S.A. de C.V.
Bvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38,
Piedras Negras, Coahuila

ATTENTION: **Ing. María Valdez**



Report No.: MX11-1040-07
Date : 2011-06-16

TEST REPORT

APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Ing. María Valdez

SAMPLE DESCRIPTION

One (1) group of submitted samples said to be :
Sample Description Serie 257
Item No. 7) N/P 057887 Colorant Yellow
Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2011-05-19
Testing period 2011-05-23 to 2011-06-09

TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

CONCLUSION

<u>Sample Number</u>	<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
7	N/P 057887 Colorant Yellow	Pass See Result summary	---	---

TEST CONDUCTED

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1ª. Emisión Junio 2005, 1º Revisión Junio 26, 2009.

ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

www.intertek.com

Samples:

7) N/P 057887 Colorant Yellow

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)	Limit
	(7)	
Cadmium (Cd) content	ND	0,01% (100 ppm)
Lead (Pb) content	ND	0,1% (1000 ppm)
Mercury (Hg) content	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	0,1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs) Total	ND	0,1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	---
Dibromobiphenyl (DiBB)	ND	---
Tribromobiphenyl (TriBB)	ND	---
Tetrabromobiphenyl (TetraBB)	ND	---
Pentabromobiphenyl (PentaBB)	ND	---
Hexabromobiphenyl (HexaBB)	ND	---
Heptabromobiphenyl (HeptaBB)	ND	---
Octabromobiphenyl (OctaBB)	ND	---
Nonabromobiphenyl (NonaBB)	ND	---
Decabromobiphenyl (DecaBB)	ND	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs) Total	ND	0,1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	---
Dibromodiphenyl (DiBDE)	ND	---
Tribromodiphenyl (TriBDE)	ND	---
Tetrabromodiphenyl (TetraBDE)	ND	---
Pentabromodiphenyl (PentaBDE)	ND	---
Hexabromodiphenyl (HexaBDE)	ND	---
Heptabromodiphenyl (HeptaBDE)	ND	---
Octabromodiphenyl (OctaBDE)	ND	---
Nonabromodiphenyl (NonaBDE)	ND	---
Decabromodiphenyl (DecaBDE)	ND	---

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Report No.: MX11-1040-07

Date : 2011-06-16

TESTING ITEM	▲ RESULT (ppm)
	(7)
Fluor (F) content	ND
Chlorine (Cl) content	ND
Bromine (Br) content	ND
Iodine (I) content	ND

ppm = parts per million based on dry weight of sample.

$\mu\text{g}/\text{cm}^2$ = microgram per square centimeter.

mg/kg WITH 50cm² = milligram per kilogram with 50 square centimeter.

< = less than.

ND = Not detected.

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

These Accreditations only apply for the methods listed in such. Not accredited under EMA Ω .

Prepared and checked by :
For Intertek

Laboratory Manager

The Official Mexican Standard NOM-008-SCFI-1993 establishes like separator decimal the comma (,).

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-1040-07 WERE TESTED TOGETHER.

Test method :

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ILTA/003/GENS-F8

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Poniente 134 No. 660, Col. Industrial Vallejo

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Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
7	Chromium VI (Cr ⁶⁺) content	With reference to USEPA 3060, by EPA 7196	QHU2010-61p76,78	2011-05-26	MELA	20,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
7	POLYBROMINATE D BIPHENYLS (PBBs)	Determined by GC-MSD	2011-000307-PCL	2011-06-09	▲ CONT	50,0
7	POLYBROMINATE D DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2011-000307-PCL	2011-06-09	▲ CONT	50,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
7	Lead (Pb) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p144	2011-05-26	MARY	5,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
7	Cadmium (Cd) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p144	2011-05-26	MARY	2,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
7	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-40p139	2010-05-23	RNC	0,25

Sample Number	Testing item	▲ Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
7	Fluor	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30
7	Chlorine	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30
7	Bromine	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30
7	Iodine	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30

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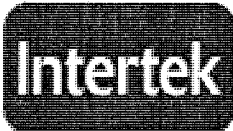
1ª. Emisión Junio 2005, 1° Revisión Junio 26, 2009.

ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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Report No.: MX10-1165-Serie 297

Date : 2010-06-18

RESULTS REPORT
INTERTEK TESTING SERVICES
DE MEXICO SA DE CV
LABORATORIO CD. DE MEXICO

DELIVER TO:

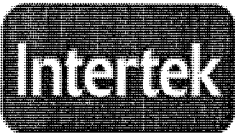
Littelfuse, S.A. de C.V.
Blvd. Fausto Z. mtz. 1800, Col. Magisterio Sección 38, Piedras
Negras, Coahuila

ATTENTION: Ing. Mario A. Falcón

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01



Report No.: MX10-1165-Serie 297

Date : 2010-06-18

TEST REPORT

APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. mtz. 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Ing. Mario A. Falcón

SAMPLE DESCRIPTION

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

Sample Description	NP
	9) Serie 297 P/N: 425498
	10) Serie 297 P/N: 425711
	11) Serie 297 P/N: 057875
	12) Serie 297 P/N: 057882
Item No.	13) Serie 297 P/N: 057877
	14) Serie 297 P/N: 057348
	15) Serie 297 P/N: 955408

Country of Origin	NP
Buyer's Name	NP
Supplier's Name	NP
Date sample received	2010-05-26
Testing period	2010-06-01 to 2010-06-18

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TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

ONCLUSION

	<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
9	Serie 297 P/N: 425498	Pass See Result summary	---	---
10	Serie 297 P/N: 425711	Pass See Result summary	---	---
11	Serie 297 P/N: 057875	Pass See Result summary	---	---
12	Serie 297 P/N: 057882	Pass See Result summary	---	---
13	Serie 297 P/N: 057877	Pass See Result summary	---	---
14	Serie 297 P/N 057348	Pass See Result summary	---	---
15	Serie 297 P/N: 955408	Pass See Result summary	---	---

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TEST CONDUCTED

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

12) Serie 297 P/N: 057882

13) Serie 297 P/N: 057877

14) Serie 297 P/N 057348

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)			Limit
	(12)	(13)	(14)	
Cadmium (Cd) content	ND	ND	ND	0,01% (100 ppm)
Lead (Pb) content	ND	ND	ND	0,1% (1000 ppm)
Mercury (Hg) content	ND	ND	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	ND	ND	0,1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs)	ND	ND	ND	0,1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	ND	ND	---
Dibromobiphenyl (DiBB)	ND	ND	ND	---
Tribromobiphenyl (TriBB)	ND	ND	ND	---
Tetrabromobiphenyl (TetraBB)	ND	ND	ND	---
Pentabromobiphenyl (PentaBB)	ND	ND	ND	---
Hexabromobiphenyl (HexaBB)	ND	ND	ND	---
Heptabromobiphenyl (HeptaBB)	ND	ND	ND	---
Octabromobiphenyl (OctaBB)	ND	ND	ND	---
Nonabromobiphenyl (NonaBB)	ND	ND	ND	---
Decabromobiphenyl (DecaBB)	ND	ND	ND	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	ND	ND	ND	0,1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	ND	ND	---
Dibromodiphenyl (DiBDE)	ND	ND	ND	---
Tribromodiphenyl (TriBDE)	ND	ND	ND	---
Tetrabromodiphenyl (TetraBDE)	ND	ND	ND	---
Pentabromodiphenyl (PentaBDE)	ND	ND	ND	---
Hexabromodiphenyl (HexaBDE)	ND	ND	ND	---
Heptabromodiphenyl (HeptaBDE)	ND	ND	ND	---
Octabromodiphenyl (OctaBDE)	ND	ND	ND	---
Nonabromodiphenyl (NonaBDE)	ND	ND	ND	---
Decabromodiphenyl (DecaBDE)	ND	ND	ND	---

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05



NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-9 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-10 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-11 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-12 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-13 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-14 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 1165-15 WERE TESTED TOGETHER.

Test method :

No. de Muestra	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
	Chromium VI (Cr ⁶⁺) content	With reference to USEPA 3060, by EPA 7196	QHU2009-3p99,100	2010-06-05	MTCM	2,0

No. de Muestra	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
	POLYBROMINATED BIPHENYLS (PBBs)	Determined by GC-MSD	2010-004481-PCL	2010-06-18	▲ Contract	50
	POLYBROMINATED DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2010-004481-PCL	2010-06-18	▲ Contract	50

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Report No.: MX10-1165-Serie 297

Date : 2010-06-18

No. de Muestra	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
9	Lead (Pb) content	With reference to USEPA 3052MOD, by EPA 7420	MET2010-8p27	2010-06-03	MARY	10,0
10	Lead (Pb) content	With reference to USEPA 3052MOD, by EPA 7420	MET2010-8p27	2010-06-03	MARY	10,0
11	Lead (Pb) content	With reference to USEPA 3052MOD, by EPA 7420	MET2010-8p27	2010-06-03	MARY	10,0
12	Lead (Pb) content	With reference to USEPA 3052MOD, by EPA 7420	MET2010-8p26	2010-06-03	MARY	10,0
13	Lead (Pb) content	With reference to USEPA 3052MOD, by EPA 7420	MET2010-8p27	2010-06-03	MARY	10,0
14	Lead (Pb) content	With reference to USEPA 3052MOD, by EPA 7420	MET2010-8p27	2010-06-03	MARY	10,0
15	Lead (Pb) content	With reference to USEPA 3050MOD, by EPA 7420	MET2010-8p26	2010-06-03	MARY	10,0

No. de Muestra	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
9	Cadmium (Cd) content	With reference to USEPA 3052MOD, by EPA 7130	MET2010-8p27	2010-06-03	MARY	2,5
10	Cadmium (Cd) content	With reference to USEPA 3052MOD, by EPA 7130	MET2010-8p27	2010-06-03	MARY	2,5
11	Cadmium (Cd) content	With reference to USEPA 3052MOD, by EPA 7130	MET2010-8p27	2010-06-03	MARY	2,5
12	Cadmium (Cd) content	With reference to USEPA 3052MOD, by EPA 7130	MET2010-8p26	2010-06-03	MARY	2,5
13	Cadmium (Cd) content	With reference to USEPA 3052MOD, by EPA 7130	MET2010-8p27	2010-06-03	MARY	2,5
14	Cadmium (Cd) content	With reference to USEPA 3052MOD, by EPA 7130	MET2010-8p27	2010-06-03	MARY	2,5
15	Cadmium (Cd) content	With reference to USEPA 3050MOD, by EPA 7130	MET2010-8p26	2010-06-03	MARY	2,5

No. de Muestra	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
9	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p22	2010-06-02	JAPM	0,083
10	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p22	2010-06-02	JAPM	0,083
11	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p22	2010-06-02	JAPM	0,083
12	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p22	2010-06-02	JAPM	0,083
13	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p22	2010-06-02	JAPM	0,083
14	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p22	2010-06-02	JAPM	0,083
15	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-8p23	2010-06-02	JAPM	0,083

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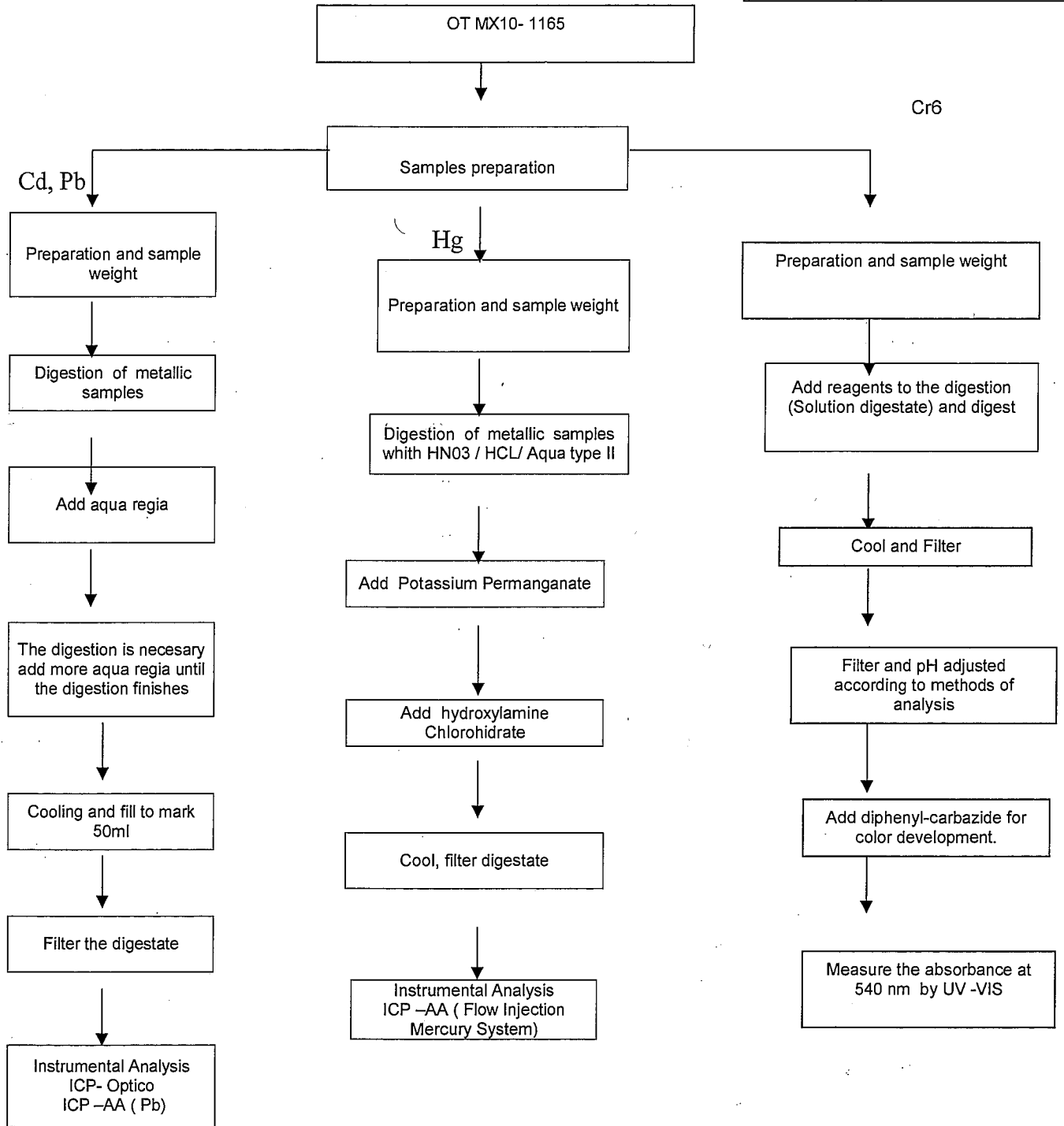
Intertek Testing Services de México, S.A. de C.V.

Bldv. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec
C.P. 11650, México, D.F. Tel.: 50912150 Fax: 55407863

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08

Metallic samples
Flow chart for samples: 15



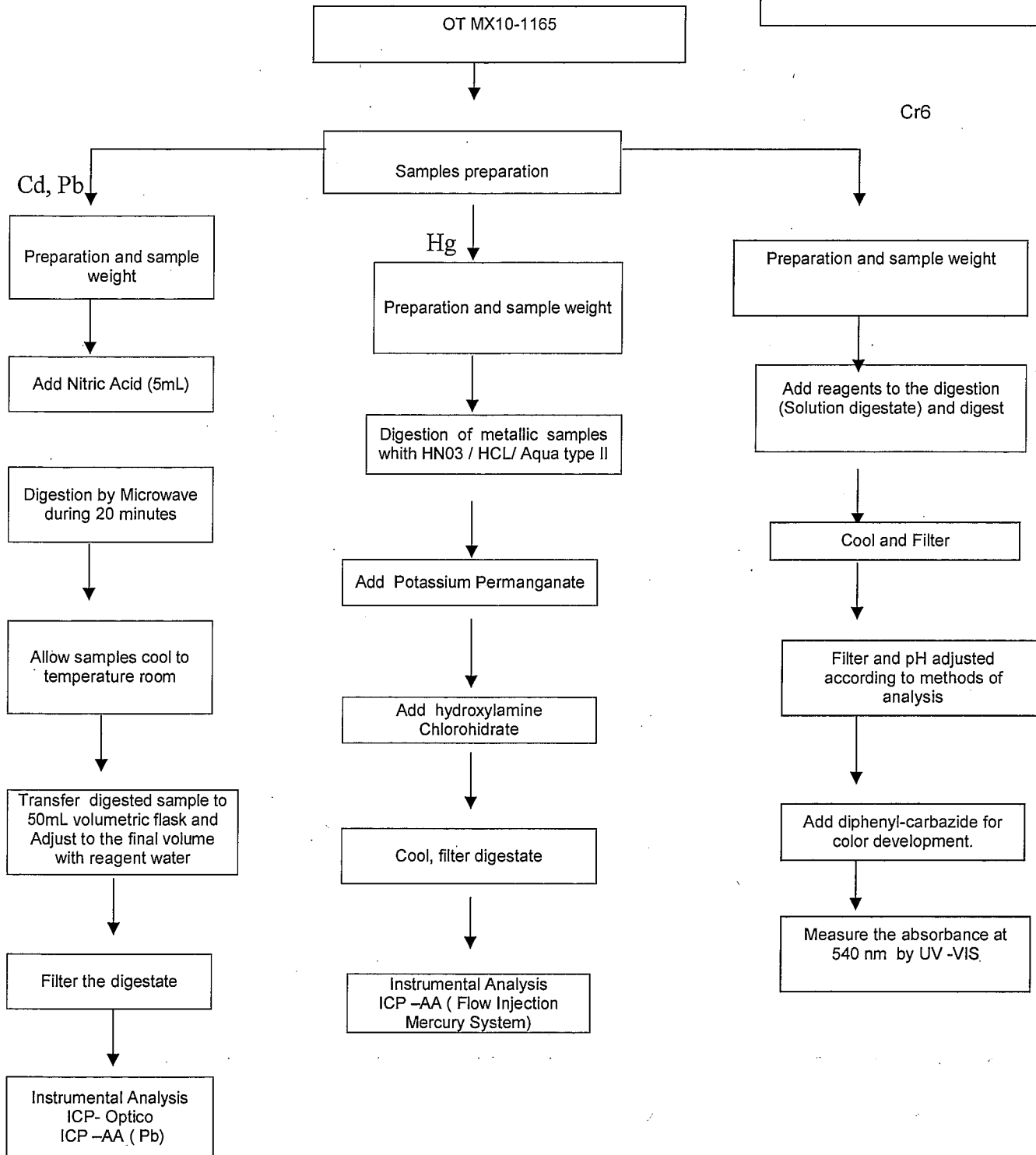
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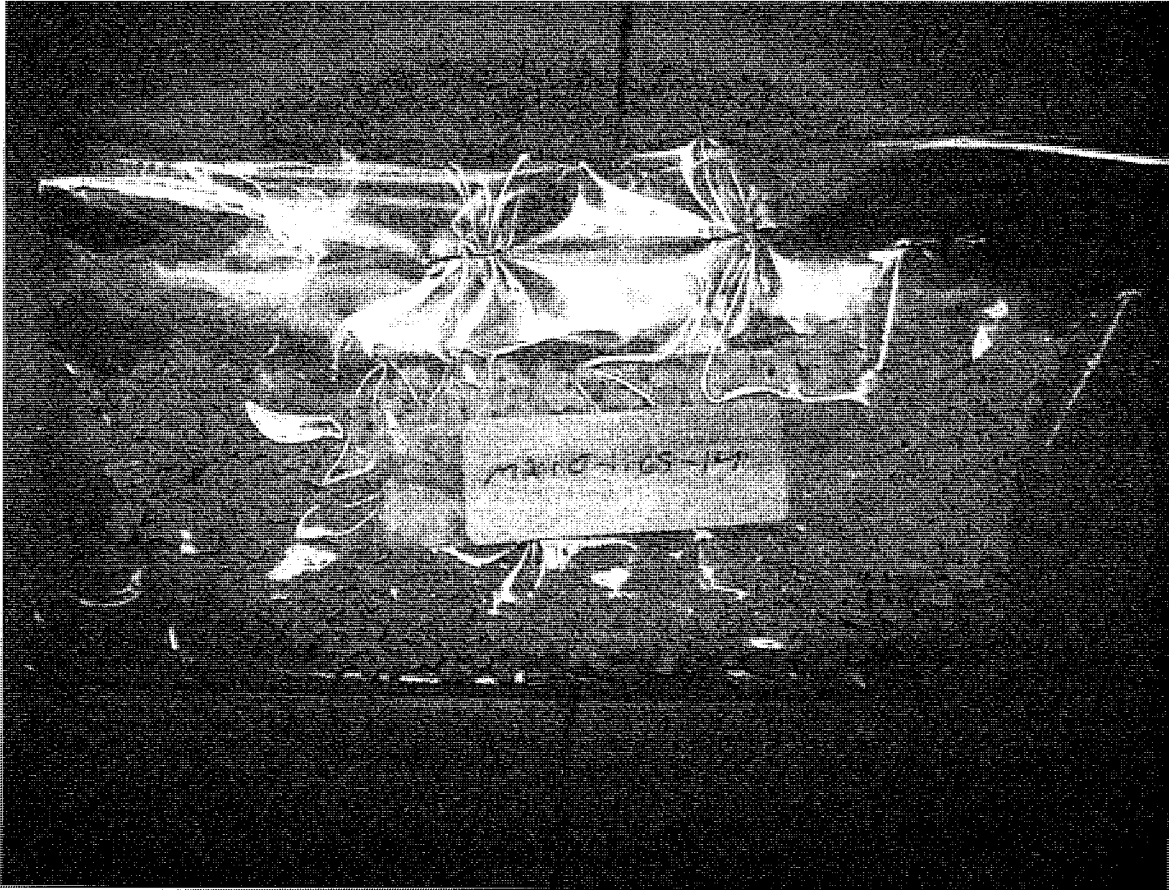
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Plastic samples
Flow chart for samples: 9, 10, 11,
12, 13, 14



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MX10-1165-14



RESULTS REPORT
INTERTEK TESTING SERVICES
DE MEXICO SA DE CV
LABORATORIO CD. DE MEXICO

DELIVER TO:

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38,
Piedras Negras, Coahuila

ATTENTION: Ing. María Valdez

000001



Report No.: MX1-0593
Date : 2011-05-02

TEST REPORT

APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Ing. María Valdez

SAMPLE DESCRIPTION

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

Sample Description	NP
	1) N/P 057249
	2) N/P 057357
Item No.	3) N/P 057883
	4) N/P 057838
	5) N/P 057259

Country of Origin	NP
Buyer's Name	NP
Supplier's Name	NP
Date sample received	2011-03-02
Testing period	2011-04-14 to 2011-04-27

TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

CONCLUSION

Sample Number	Testing item	Conclusion	Failed component	Failed result
1	N/P 057249	Pass See Result summary	---	---
2	N/P 057357	Pass See Result summary	---	---
3	N/P 057883	Pass See Result summary	---	---
4	N/P 057838	Pass See Result summary	---	---
5	N/P 057259	Pass See Result summary	---	---

000002

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ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

www.intertek.com





Report No.: MX1-0593

Date : 2011-05-02

TEST CONDUCTED

Samples:

- 1) N/P 057249
- 2) N/P 057357
- 3) N/P 057883

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)			Limit
	(1)	(2)	(3)	
Fluor (F) content	ND	ND	ND	30 ppm
Chlorine (Cl) content	ND	ND	ND	30 ppm
Bromine (Br) content	45751	ND	ND	30 ppm
Iodine (I) content	ND	ND	ND	30 ppm
POLYBROMINATED BIPHENYLS (PBBs) Total	ND	ND	ND	0.1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	ND	ND	---
Dibromobiphenyl (DiBB)	ND	ND	ND	---
Tribromobiphenyl (TriBB)	ND	ND	ND	---
Tetrabromobiphenyl (TetraBB)	ND	ND	ND	---
Pentabromobiphenyl (PentaBB)	ND	ND	ND	---
Hexabromobiphenyl (HexaBB)	ND	ND	ND	---
Heptabromobiphenyl (HeptaBB)	ND	ND	ND	---
Octabromobiphenyl (OctaBB)	ND	ND	ND	---
Nonabromobiphenyl (NonaBB)	ND	ND	ND	---
Decabromobiphenyl (DecaBB)	ND	ND	ND	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs) Total	ND	ND	ND	0.1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	ND	ND	---
Dibromodiphenyl (DiBDE)	ND	ND	ND	---
Tribromodiphenyl (TriBDE)	ND	ND	ND	---
Tetrabromodiphenyl (TetraBDE)	ND	ND	ND	---
Pentabromodiphenyl (PentaBDE)	ND	ND	ND	---
Hexabromodiphenyl (HexaBDE)	ND	ND	ND	---
Heptabromodiphenyl (HeptaBDE)	ND	ND	ND	---
Octabromodiphenyl (OctaBDE)	ND	ND	ND	---
Nonabromodiphenyl (NonaBDE)	ND	ND	ND	---
Decabromodiphenyl (DecaBDE)	ND	ND	ND	---

000003

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Report No.: MX1-0593

Date : 2011-05-02

TEST CONDUCTED

Samples:

- 4) N/P 057838
- 5) N/P 057259

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)		Limit
	(4)	(5)	
Fluor (F) content	ND	ND	30 ppm
Chlorine (Cl) content	1 777,0	ND	30 ppm
Bromine (Br) content	6 045	37 238	30 ppm
Iodine (I) content	ND	ND	30 ppm

ppm = parts per million based on dry weight of sample.

µg/cm² = microgram per square centimeter.

mg/kg WITH 50cm² = milligram per kilogram with 50 square centimeter.

< = less than.

ND = Not detected.

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

These Accreditations only apply for the methods listed in such. Not accredited under EMA Ω.

Prepared and checked by :

For Intertek

Wanda Lopez
Coordinadora de Area

Laboratory Manager

The Official Mexican Standard NOM-008-SCFI-1993 establishes like separator decimal the comma (,).

000004

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1ª. Emisión Junio 2005, 1ª Revisión Junio 28, 2009.

ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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AL



Report No.: MX1-0593

Date : 2011-05-02

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-0593-01 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-0593-02 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-0593-03 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-0593-04 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-0593-05 WERE TESTED TOGETHER.

Test method :

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1-5	Fluor	With reference to EN 14582:2007by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000238-PCL	2011-04-27	▲ CONT	30
1-5	Chlorine	With reference to EN 14582:2007by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000238-PCL	2011-04-27	▲ CONT	30
1-5	Bromine	With reference to EN 14582:2007by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000238-PCL	2011-04-27	▲ CONT	30
1-5	Iodine	With reference to EN 14582:2007by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000238-PCL	2011-04-27	▲ CONT	30

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1-3	POLYBROMINATE D BIPHENYLS (PBBs)	Determined by GC-MSD	2011-000238-PCL	2011-04-27	▲ CONT	50,0
1-3	POLYBROMINATE D DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2011-000238-PCL	2011-04-27	▲ CONT	50,0

000005

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ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

www.intertek.com





Test Report

Number : TWNC00213359

Applicant: Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martinez #1800
Col. Magisterio Seccion 38 C.P.
26070 Piedra Negras, Coahuila,
Mexico

Date : Jun 30, 2011

Sample Description:

One (1) group of submitted samples said to be :
Part Description : COLORANT BROWN
Part Number : 057878
Date Sample Received : Jun 28, 2011
Date Test Started : Jun 28, 2011

Test Conducted :

As requested by the applicant, for details please refer to attached pages.

Authorized By:
On Behalf Of Intertek Testing Services
Taiwan Limited



K. Y. Liang
Director

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except in full, without the written
approval of the laboratory.



Number : TWNC00213359

Test Conducted

(I) Test Result Summary :

<u>Test Item</u>	<u>Result (ppm)</u>
	<u>Black Plastic Pellets</u>
Heavy Metal	
Cadmium (Cd) content	ND
Lead (Pb) content	ND
Mercury (Hg) content	ND
Chromium VI (Cr ⁶⁺) content	ND
Polybrominated Biphenyls (PBBs)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND

Remarks: ppm = Parts per million based on weight of tested sample = mg/kg
ND = Not detected

Responsibility Of Chemist : Irene Chiou / Kevin Liu / Cathy Chen

Date Sample Received : Jun 28, 2011

Test Period : Jun 28, 2011 to Jun 30, 2011



Number : TWNC00213359

Test Conducted

(II) RoHS Requirement :

<u>Restricted Substances</u>	<u>Limits</u>
Cadmium (Cd) Content	0.01% (100ppm)
Lead (Pb) Content	0.1% (1000ppm)
Mercury (Hg) Content	0.1% (1000ppm)
Chromium VI (Cr ⁶⁺) Content	0.1% (1000ppm)
Polybrominated Biphenyls (PBBs)	0.1% (1000ppm)
Polybrominated Diphenyl Ehters (PBDEs)	0.1% (1000ppm)

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

(III) Test Method :

<u>Test Item</u>	<u>Test Method</u>	<u>Reporting Limit</u>
Cadmium (Cd) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Lead (Pb) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Mercury (Hg) content	With reference to IEC 62321 edition 1.0:2008 in clause 7, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Chromium VI (Cr ⁶⁺) content	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer.	1 ppm



Number : TWNC00213359

Test Conducted
(III) Test Method:

<u>Test Item</u>	<u>Test Method</u>	<u>Reporting Limit</u>
Polybrominated Biphenyls (PBBs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm
Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm

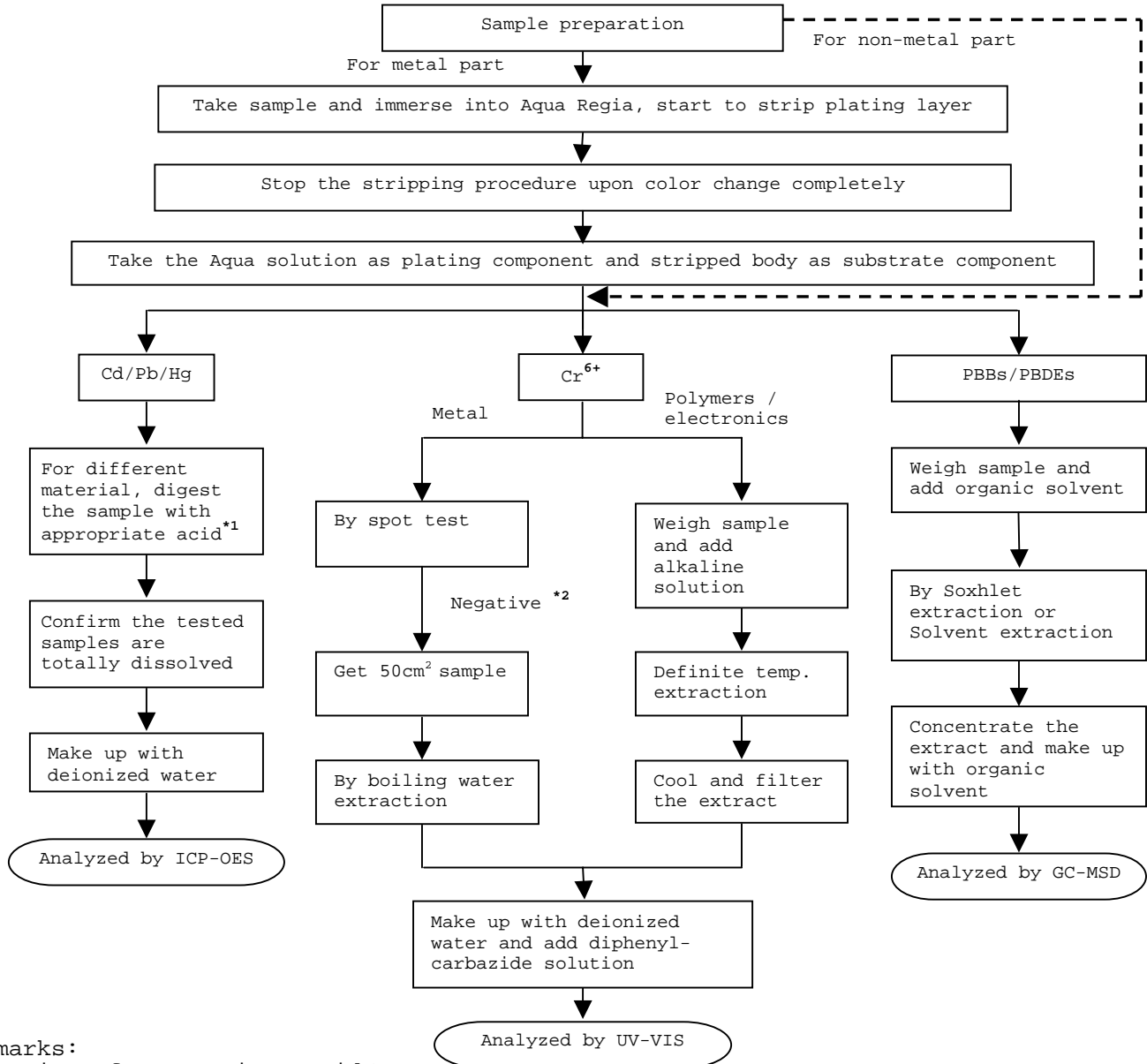
Remark: Reporting limit = Quantitation limit of analyte in sample

Test Conducted

(IV) Measurement Flowchart:

Test For Cd/Pb/Hg/Chromium (VI)/PBBS/PBDES Contents

Reference Standard: IEC 62321 edition 1.0:2008



Remarks:

*1: List Of Appropriate Acid :

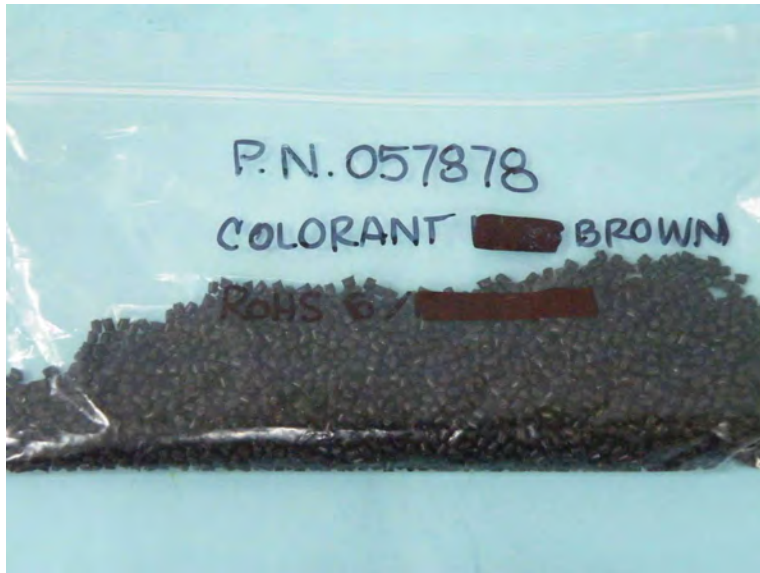
Material	Acid Added For Digestion
Polymers	HNO ₃ , HCl, HF, H ₂ O ₂ , H ₃ BO ₃
Metals	HNO ₃ , HCl, HF
Electronics	HNO ₃ , HCl, H ₂ O ₂ , HBF ₄

*2: If the result of spot test is positive, Chromium VI would be determined as detected.

End Of Report

Test Conducted

Photo



RESULTS REPORT

INTERTEK TESTING SERVICES

DE MEXICO SA DE CV

LABORATORIO CD. DE MEXICO

DELIVER TO:

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38,
Piedras Negras, Coahuila

ATTENTION: **Ing. María Valdez**



Report No.: MX11-1035-02
Date : 2011-06-15

TEST REPORT

APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Ing. María Valdez

SAMPLE DESCRIPTION

One (1) group of submitted samples said to be :
Sample Description Serie 297
Item No. 2) N/P 057881 Colorant Yellow
Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2011-05-19
Testing period 2011-05-23 to 2011-06-09

TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

CONCLUSION

<u>Sample Number</u>	<u>Testing item</u>	<u>Conclusion</u>	<u>Failed component</u>	<u>Failed result</u>
2	N/P 057881 Colorant Yellow	Pass See Result summary	---	---

TEST CONDUCTED

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ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

www.intertek.com

Samples:

2) N/P 057881 Colorant Yellow

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)	Limit
	(2)	
Cadmium (Cd) content	ND	0,01% (100 ppm)
Lead (Pb) content	ND	0,1% (1000 ppm)
Mercury (Hg) content	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	0,1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs) Total	ND	0,1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	---
Dibromobiphenyl (DiBB)	ND	---
Tribromobiphenyl (TriBB)	ND	---
Tetrabromobiphenyl (TetraBB)	ND	---
Pentabromobiphenyl (PentaBB)	ND	---
Hexabromobiphenyl (HexaBB)	ND	---
Heptabromobiphenyl (HeptaBB)	ND	---
Octabromobiphenyl (OctaBB)	ND	---
Nonabromobiphenyl (NonaBB)	ND	---
Decabromobiphenyl (DecaBB)	ND	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs) Total	ND	0,1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	---
Dibromodiphenyl (DiBDE)	ND	---
Tribromodiphenyl (TriBDE)	ND	---
Tetrabromodiphenyl (TetraBDE)	ND	---
Pentabromodiphenyl (PentaBDE)	ND	---
Hexabromodiphenyl (HexaBDE)	ND	---
Heptabromodiphenyl (HeptaBDE)	ND	---
Octabromodiphenyl (OctaBDE)	ND	---
Nonabromodiphenyl (NonaBDE)	ND	---
Decabromodiphenyl (DecaBDE)	ND	---

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C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

www.intertek.com



Report No.: MX11-1035-02
Date : 2011-06-15

TESTING ITEM	▲ RESULT (ppm)
	(2)
Fluor (F) content	ND
Chlorine (Cl) content	ND
Bromine (Br) content	ND
Iodine (I) content	ND

ppm = parts per million based on dry weight of sample.

$\mu\text{g}/\text{cm}^2$ = microgram per square centimeter.

mg/kg WITH 50cm^2 = milligram per kilogram with 50 square centimeter.

< = less than.

ND = Not detected.

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

These Accreditations only apply for the methods listed in such. Not accredited under EMA Ω .

Prepared and checked by :
For Intertek

Laboratory Manager

The Official Mexican Standard NOM-008-SCFI-1993 establishes like separator decimal the comma (,).

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX11-1035-02 WERE TESTED TOGETHER.

Test method :

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ILTA/003/GENS-F8

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Poniente 134 No. 660, Col. Industrial Vallejo

C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
2	Chromium VI (Cr ⁶⁺) content	With reference to USEPA 3060, by EPA 7196	QHU2010-61p76,78	2011-05-26	MELA	20,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
2	POLYBROMINATE D BIPHENYLS (PBBs)	Determined by GC-MSD	2011-000307-PCL	2011-06-09	▲ CONT	50,0
2	POLYBROMINATE D DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2011-000307-PCL	2011-06-09	▲ CONT	50,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
2	Lead (Pb) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p144	2011-05-26	MARY	5,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
2	Cadmium (Cd) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p144	2011-05-26	MARY	2,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
2	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-40p139	2010-05-23	RNC	0,25

Sample Number	Testing item	▲ Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
2	Fluor	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30
2	Chlorine	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30
2	Bromine	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30
2	Iodine	With reference to EN 14582:2007 by calorimetric bomb method with oxygen and determined by ion chromatography	2011-000307-PCL	2011-06-09	▲ CONT	30

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ILTA/003/GENS-F8

Intertek Testing Services de México, S.A. de C.V.

Poniente 134 No. 660, Col. Industrial Vallejo
C.P. 02300, Del. Azcapotzalco, México, D.F. Tel.: 50912150

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Test Report

Number : TWNC00213360

Applicant: Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martinez #1800
Col. Magisterio Seccion 38 C.P.
26070 Piedra Negras, Coahuila,
Mexico

Date : Jun 30, 2011

Sample Description:

One (1) group of submitted samples said to be :
Part Description : COLORANT RED
Part Number : 057879
Date Sample Received : Jun 28, 2011
Date Test Started : Jun 28, 2011

Test Conducted :

As requested by the applicant, for details please refer to attached pages.

Authorized By:
On Behalf Of Intertek Testing Services
Taiwan Limited



K. Y. Liang
Director

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Number : TWNC00213360

Test Conducted

(I) Test Result Summary :

<u>Test Item</u>	<u>Result (ppm)</u>
	<u>Black Plastic Pellets</u>
Heavy Metal	
Cadmium (Cd) content	ND
Lead (Pb) content	ND
Mercury (Hg) content	ND
Chromium VI (Cr ⁶⁺) content	ND
Polybrominated Biphenyls (PBBs)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND

Remarks: ppm = Parts per million based on weight of tested sample = mg/kg
ND = Not detected

Responsibility Of Chemist : Irene Chiou / Kevin Liu / Cathy Chen

Date Sample Received : Jun 28, 2011

Test Period : Jun 28, 2011 to Jun 30, 2011



Number : TWNC00213360

Test Conducted

(II) RoHS Requirement :

<u>Restricted Substances</u>	<u>Limits</u>
Cadmium (Cd) Content	0.01% (100ppm)
Lead (Pb) Content	0.1% (1000ppm)
Mercury (Hg) Content	0.1% (1000ppm)
Chromium VI (Cr ⁶⁺) Content	0.1% (1000ppm)
Polybrominated Biphenyls (PBBs)	0.1% (1000ppm)
Polybrominated Diphenyl Ehters (PBDEs)	0.1% (1000ppm)

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

(III) Test Method :

<u>Test Item</u>	<u>Test Method</u>	<u>Reporting Limit</u>
Cadmium (Cd) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Lead (Pb) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Mercury (Hg) content	With reference to IEC 62321 edition 1.0:2008 in clause 7, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Chromium VI (Cr ⁶⁺) content	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer.	1 ppm



Number : TWNC00213360

Test Conducted
(III) Test Method:

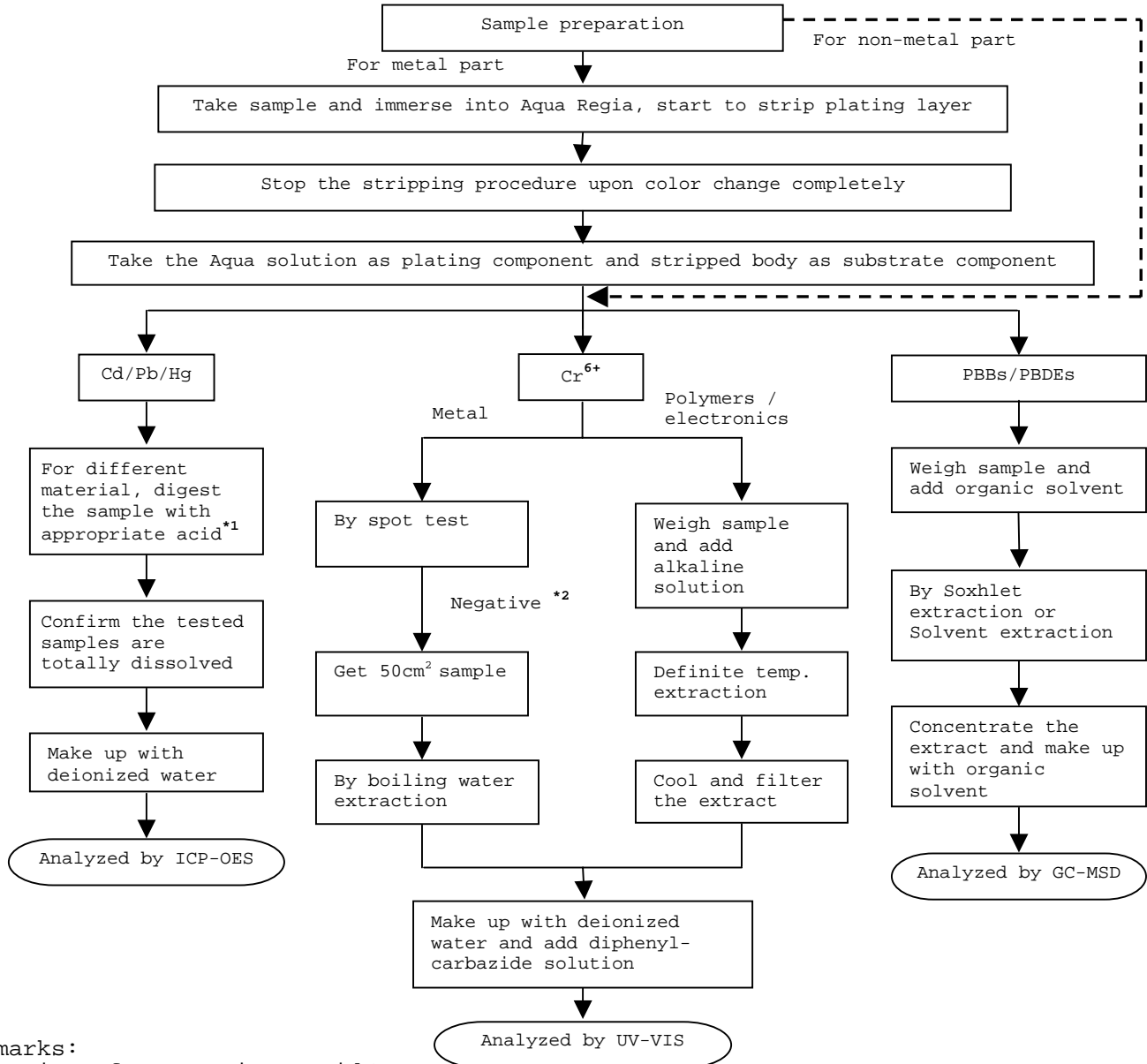
<u>Test Item</u>	<u>Test Method</u>	<u>Reporting Limit</u>
Polybrominated Biphenyls (PBBs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm
Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm

Remark: Reporting limit = Quantitation limit of analyte in sample

Test Conducted

(IV) Measurement Flowchart:

Test For Cd/Pb/Hg/Chromium (VI)/PBBS/PBDES Contents
Reference Standard: IEC 62321 edition 1.0:2008



Remarks:

*1: List Of Appropriate Acid:

Material	Acid Added For Digestion
Polymers	HNO ₃ , HCl, HF, H ₂ O ₂ , H ₃ BO ₃
Metals	HNO ₃ , HCl, HF
Electronics	HNO ₃ , HCl, H ₂ O ₂ , HBF ₄

*2: If the result of spot test is positive, Chromium VI would be determined as detected.

End Of Report

Test Conducted

Photo



RESULTS REPORT
INTERTEK TESTING SERVICES
DE MEXICO SA DE CV
LABORATORIO CD. DE MEXICO

DELIVER TO:

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38,
Piedras Negras, Coahuila

ATTENTION: Maria Valdez

TEST REPORT**APPLICANT**

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Martínez 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila
Maria Valdez

SAMPLE DESCRIPTION

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

Sample Description	Serie 299, / *Serie 299 y 999
	1) PN 955410 Plated Zn strip (base)
	2) PN 955410 Plated Zn strip (plateado)
Item No.	3) PN 692536 Solder
	4) PN 057880 Colorant Blue
	5) PN 057884 Colorant Orange, Colorant Red *

Country of Origin	NP
Buyer's Name	NP
Supplier's Name	NP
Date sample received	2010-12-06
Testing period	2010-12-09 to 2010-12-14

TEST CONDUCTED

As requested by the applicant, for details please refer to attached pages.

CONCLUSION

Sample Number	Testing item	Conclusion	Failed component	Failed result
1	PN 955410 Plated Zn strip (base)	Pass See Result summary	---	---
2	PN 955410 Plated Zn strip (plateado)	Pass See Result summary	---	---
3	PN 692536 Solder	Pass See Result summary	---	---
4	PN 057880 Colorant Blue	Pass See Result summary	---	---
5	PN 057884 Colorant Orange, Colorant Red *	Pass See Result summary	---	---

TEST CONDUCTED

Samples:

- 1) PN 955410 Plated Zn strip (base)
- 2) PN 955410 Plated Zn strip (plateado)
- 3) PN 692536 Solder

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

TESTING ITEM	Ω RESULT (ppm)			Limit
	(1)	(2)	(3)	
Cadmium (Cd) content	ND	ND	ND	0,01% (100 ppm)
Lead (Pb) content	ND	383,2	139,4	0,1% (1000 ppm)
Mercury (Hg) content	ND	ND	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	ND	ND	0,1% (1000 ppm)



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- 4) PN 057880 Colorant Blue
 5) PN 057884 Colorant Orange, Colorant Red *

TESTING ITEM	Ω RESULT (ppm)		Limit
	(4)	(5)	
Cadmium (Cd) content	ND	ND	0,01% (100 ppm)
Lead (Pb) content	ND	ND	0,1% (1000 ppm)
Mercury (Hg) content	ND	ND	0,1% (1000 ppm)
Chromium (VI) (Cr ⁶⁺)	ND	ND	0,1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs) Total	ND	ND	0,1% (1000 ppm)
Monobromobiphenyl (MonoBB)	ND	ND	---
Dibromobiphenyl (DiBB)	ND	ND	---
Tribromobiphenyl (TriBB)	ND	ND	---
Tetrabromobiphenyl (TetraBB)	ND	ND	---
Pentabromobiphenyl (PentaBB)	ND	ND	---
Hexabromobiphenyl (HexaBB)	ND	ND	---
Heptabromobiphenyl (HeptaBB)	ND	ND	---
Octabromobiphenyl (OctaBB)	ND	ND	---
Nonabromobiphenyl (NonaBB)	ND	ND	---
Decabromobiphenyl (DecaBB)	ND	ND	---
POLYBROMINATED DIPHENYL ETHERS (PBDEs) Total	ND	ND	0,1% (1000 ppm)
Monobromodiphenyl (MonoBDE)	ND	ND	---
Dibromodiphenyl (DiBDE)	ND	ND	---
Tribromodiphenyl (TriBDE)	ND	ND	---
Tetrabromodiphenyl (TetraBDE)	ND	ND	---
Pentabromodiphenyl (PentaBDE)	ND	ND	---
Hexabromodiphenyl (HexaBDE)	ND	ND	---
Heptabromodiphenyl (HeptaBDE)	ND	ND	---
Octabromodiphenyl (OctaBDE)	ND	ND	---
Nonabromodiphenyl (NonaBDE)	ND	ND	---
Decabromodiphenyl (DecaBDE)	ND	ND	---

ppm = parts per million based on dry weight of sample.
 µg/cm² = microgram per square centimeter.
 mg/kg WITH 50cm² = milligram per kilogram with 50 square centimeter.
 < = less than.



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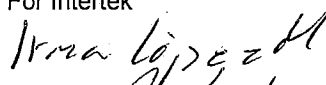
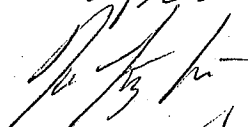
ND = Not detected.

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

These Accreditations only apply for the methods listed in such. Not accredited under EMA Ω .

Prepared and checked by :

For Intertek



coord. de área

Laboratory Manager

The Official Mexican Standard NOM-008-SCFI-1993 establishes like separator decimal the comma (,).

NOTE :DecaBDE IN POLYMERIC APPLICATIONS IS EXEMPTED ACCORDING TO ROHS DIRECTIVE AMENDMENT 2005/717/EC.

=ACCORDING TO IEC 62321, A POSITIVE RESULT INDICATES THE PRESENCE OF Cr(VI) COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE Cr(VI) CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-3013-01 WERE TESTED TOGETHER.REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-3013-02 WERE TESTED TOGETHER.REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-3013-03 WERE TESTED TOGETHER.REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-3013-04 WERE TESTED TOGETHER.REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-3013-05 WERE TESTED TOGETHER.

Test method :

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1-5	Chromium VI (Cr ⁶⁺) content	With reference to USEPA 3060, by EPA 7196	QHU2010-45p11	2010-12-14	MELA,JPR	20,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
4, 5	POLYBROMINATE D BIPHENYLS (PBBs)	Determined by GC-MSD	2010-004967-PCL	2010-12-14	▲ CONT	50,0
4, 5	POLYBROMINATE D DIPHENYL ETHERS (PBDEs)	Determined by GC-MSD	2010-004967-PCL	2010-12-14	▲ CONT	50,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Lead (Pb) content	With reference to USEPA 3050 MOD, by EPA 6010	MET2010-40p38	2010-12-10	MARY,JMR	5,0
2	Lead (Pb) content	With reference to USEPA 3050 MOD, by EPA 6010	MET2010-40p38	2010-12-10	MARY,JMR	83,33
3	Lead (Pb) content	With reference to USEPA 3050 MOD, by EPA 6010	MET2010-40p38	2010-12-10	MARY,JMR	5,0
4	Lead (Pb) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p41	2010-12-10	MARY,JMR	5,0
5	Lead (Pb) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p41	2010-12-10	MARY,JMR	5,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Cadmium (Cd) content	With reference to USEPA 3050 MOD, by EPA 6010	MET2010-40p38	2010-12-10	MARY,JMR	2,0
2	Cadmium (Cd) content	With reference to USEPA 3050 MOD, by EPA 6010	MET2010-40p38	2010-12-10	MARY,JMR	33,33
3	Cadmium (Cd) content	With reference to USEPA 3050 MOD, by EPA 6010	MET2010-40p38	2010-12-10	MARY,JMR	2,0
4	Cadmium (Cd) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p41	2010-12-10	MARY,JMR	2,0
5	Cadmium (Cd) content	With reference to USEPA 3052, by EPA 6010	MET2010-40p41	2010-12-10	MARY,JMR	2,0

Sample Number	Testing item	Ω Testing method	Quality control Batch:	Analysis Date:	Analyzed By:	Reporting limit ppm
1	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-22p2	2010-12-13	UBM,RNC	0,250
2	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-22p2	2010-12-13	UBM,RNC	1,667
3	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-22p2	2010-12-13	UBM,RNC	0,250
4	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-40p42	2010-12-13	UBM,RNC	0,250
5	Mercury (Hg) content	With reference to USEPA 7471 by USEPA 7471	MET2010-40p42	2010-12-13	UBM,RNC	0,250

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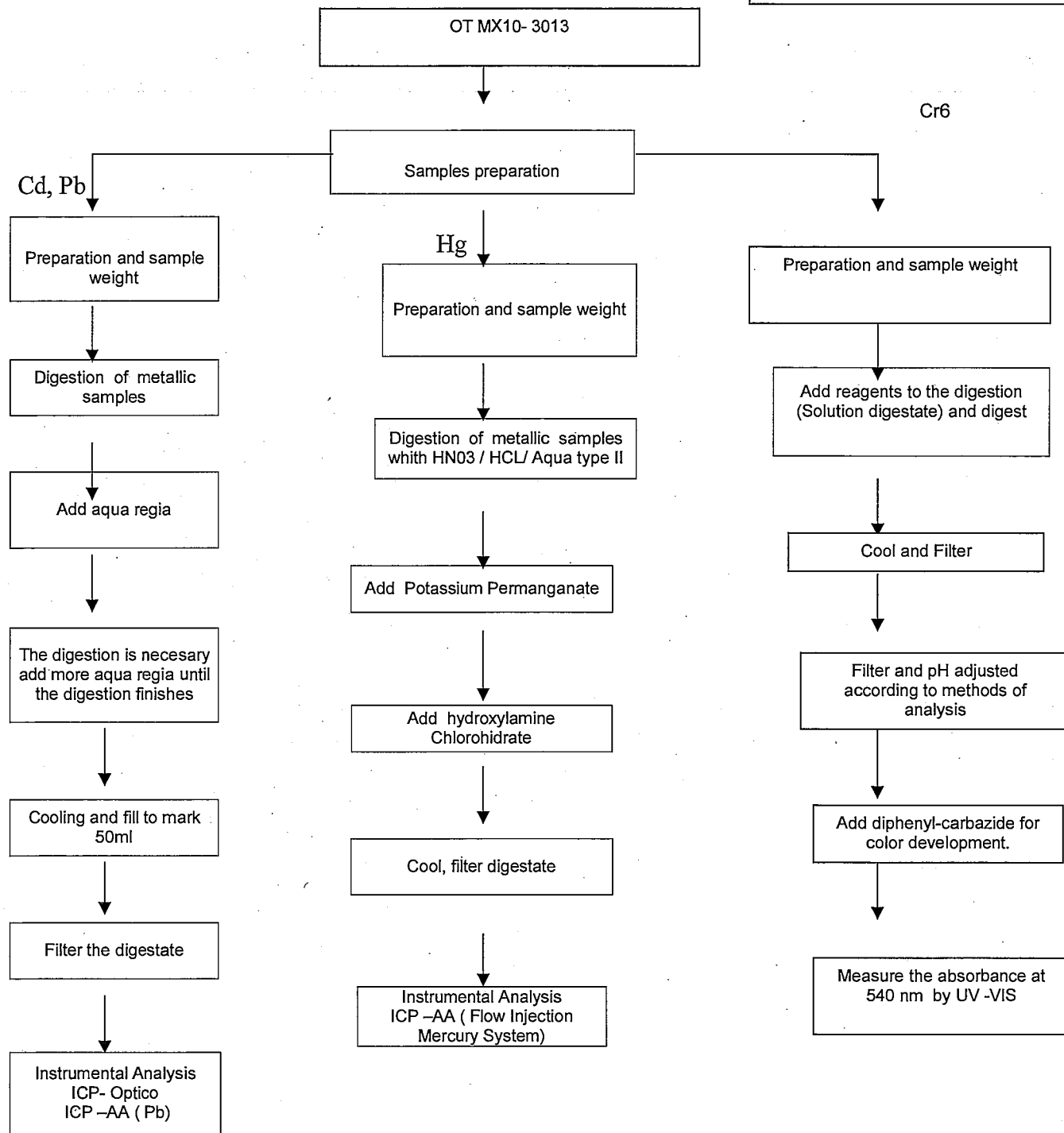


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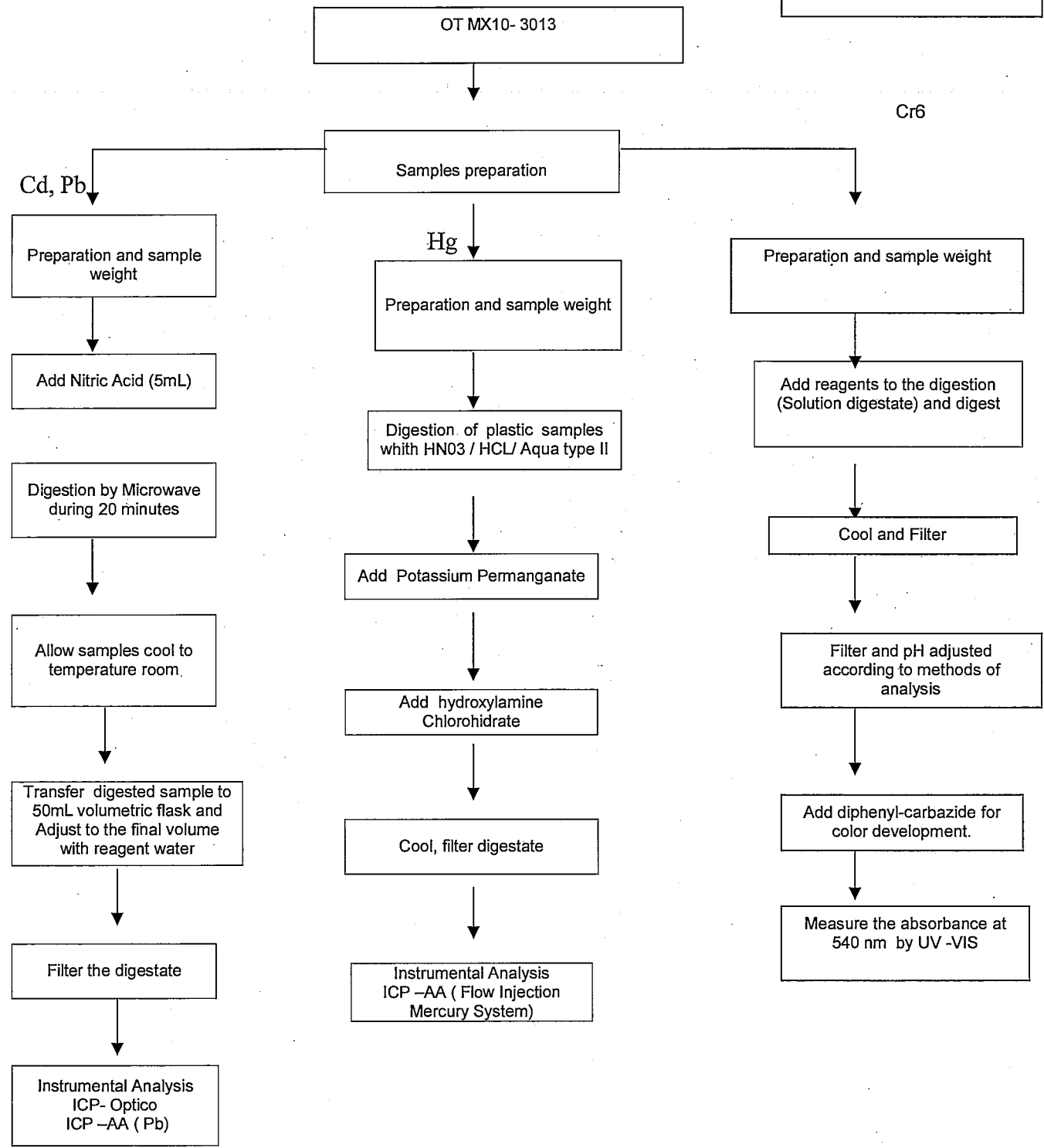
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Report No.: MX10-3013
Date: 2010-12-27

Plastic samples
Flow char for samples: 4, 5

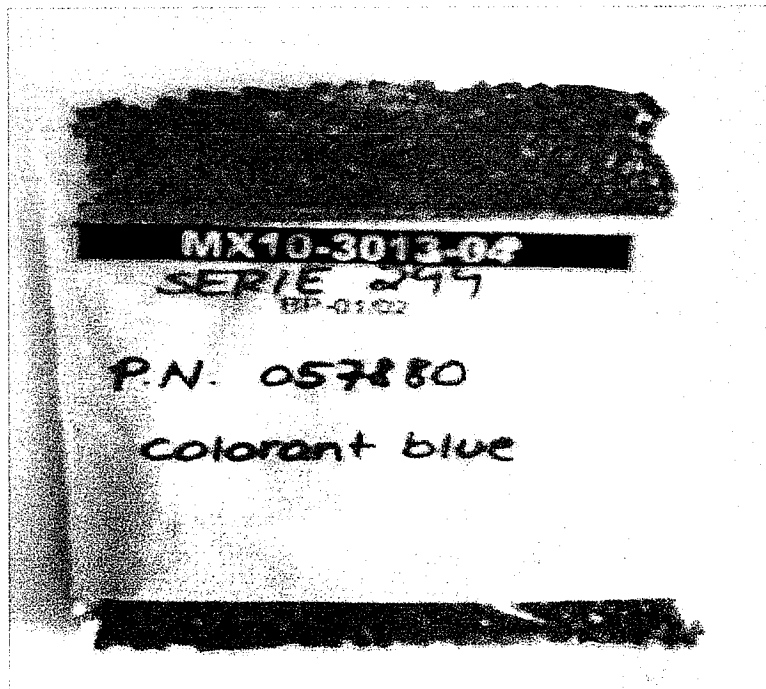
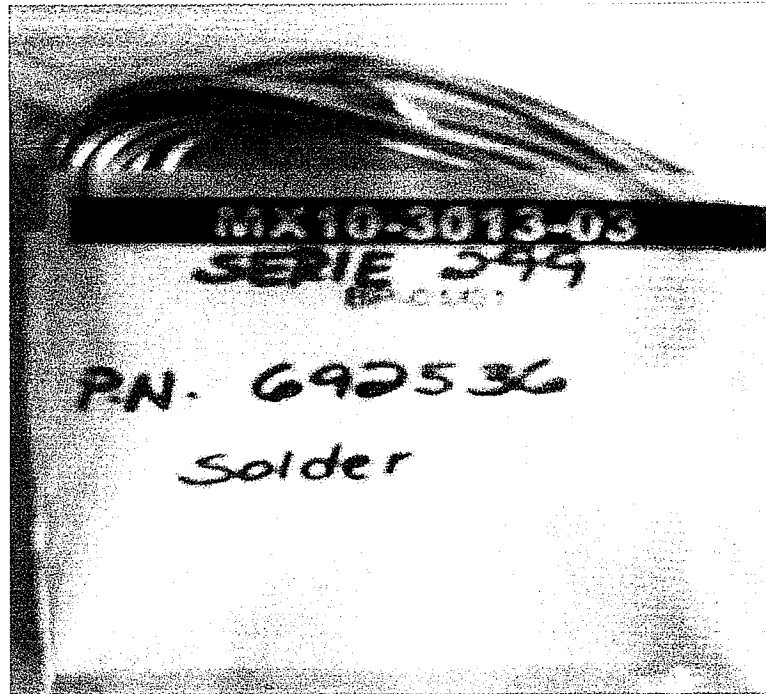


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MX10-3013



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