ICP Test Report Certification Packet

Company name: Littelfuse, Inc.
Product Series: Power-T Class T Fuse

Product \#: JLLN SERIES

Issue Date: July 13, 2010

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/packaging 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/packaging materials, and the additives and the like in the manufacturing processes, are all composed of the following components.


Issued by:
<Global EHS Coordinator>
(1) Parts, sub-materials and unit parts

This document covers the Power-T Class T Fuse 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 identifed in Table 1

[^0]Table 1: List of Raw Materials covered by this report

| Total Parts | Raw Material Part Number | Raw Material Description | Page(s) |
| :---: | :---: | :---: | :---: |
| 1 | 692264 | Solder Preform/Tin Pellet | $3-8$ |
| 2 | $927-292$ | Solder Preform | $9-14$ |
| 3 | $882-800$ | Lead | $15-18$ |
| 4 | 090190 | Filler | $19-34$ |
| 5 | 090169 | Filler | $35-43$ |
| 6 | $048 x x x$ | Brass Disc | $44-46$ |
| 7 | $898-013-001$ | Cap | $47-50$ |
| 8 | $909-5 x x$ | Body | $51-58$ |
| 9 | $685 x x x$ | Wire-Pure Ag | $59-65$ |

## RESULTS REPORT

# INTERTEK TESTING SERVICES DE MEXICO SA DE CV 

LABORATORIO CD. DE MEXICO

DELIVER TO:<br>Littelfuse, S.A. de C.V.<br>Blvd. Fausto Z Mtz. 1800, Col. Magisterio Secc. 38, Piedras Negras, Coahuila, C.P. 26070

ATTENTION: Ing. Mario Alberto Falcón

## TEST REPORT

## APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z Mtz. 1800, Col. Magisterio Secc. 38, Piedras Negras, Coahuila, C.P. 26070
Ing. Mario Alberto Falcón

## SAMPLE DESCRIPTION

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

> NP
28) Serie KLKD/JLLS Solder preform 927-296

Item No.
29) Serie KLKD Solder overlay 692264

| Country of Origin | NP |
| :--- | :--- |
| Buyer's Name | NP |
| Supplier's Name | NP |
| Date sample received | $2010-03-25$ |
| Testing period | $2010-03-29$ to 2010-04-23 |

## TEST CONDUCTED

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

CONCLUSION

| Testing item | Conclusion | Failed component | Failed result |
| :---: | :---: | :---: | :---: |
| Serie KLKD/JLLS Solder preform <br> $927-296$ | Pass <br> See Result summary | --- | --- |
| Serie KLKD Solder overlay <br> 692264 | Pass <br> See Result summary | --- | --- |

[^1]*

Report No.: MX10-0726-MOD - Serie KLKD
Date : 2010-05-07

## TEST CONDUCTED

One (1) group of submitted samples said to be :
28) Serie KLKD/JLLS Solder preform 927-296
29) Serie KLKD Solder overlay 692264

## TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (pprn) |  | Limit |
| :---: | :---: | :---: | :---: |
|  | (28) | (29) |  |
| Cadmium (Cd) content | ND | ND | 0,01\% (100 ppm) |
| Mercury ( Hg ) content | ND | ND | 0,1\% (1000 ppm) |
| Lead (Pb) content | 111,1 | 142,1 | 0,1\% (1000 ppm) |
| Chromium (VI) ( $\mathrm{Cr}^{6+}$ ) | ND | ND | 0,1\% (1000 ppm) |
| $\mathrm{ppm}=$ parts per million based on dry weight of sample. $\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter. |  |  |  |

$\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter.
$\mathrm{mg} / \mathrm{kg}$ WITH $50 \mathrm{~cm}^{2}=$ 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 $\Omega$.

Prepared and checked by :


Laboratory Manager

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

It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s).

The results that appear in this report belong solely to (s) shows (s) analyzed (s).
$1^{\text {a }}$. Emisión Junio 2005, 1 Revisión Junio 26, $2009 . \quad$ ILTA/003/GENS-F8
Intertek Testing Services de México, S.A. de C.V.
Blvd. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec
C.P. 11650, México, D.F. Tel.: 50912150 Fax: 55407863


Report No.: MX10-0726-MOD - Serie KLKD Date : 2010-05-07

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 $\mathrm{Cr}(\mathrm{VI})$ COATING. IT IS THE $\mathrm{Cr}(\mathrm{VI})$ 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 $726-28$ WERE TESTED TOGETHER.
REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 726-29 WERE TESTED TOGETHER.

## Test method :

| Testing item | $\Omega$ Testing method | Quality control Batch: | Analysis Date: | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chromium <br> content VI $\left(\mathrm{Cr}^{6+}\right)$ | With reference to USEPA 3060, by EPA 7196 | QHU2009-3p63 | 2010-04-06 | MELAJLHS, MTCM | 2,0 |


| $\frac{\text { No. de }}{\text { Muestra }}$ | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 7420 | MET2010-4p31 | $2010-04-23$ | VLM | 11,36 |
| 29 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 7420 | MET2010-4p31 | $2010-04-23$ | VLM | 9,09 |


| No. de <br> Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | Analysis <br> Date: | Analyzed <br> By: | $\frac{\text { Reporting limit }}{\underline{p p m}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p32 | $2010-04-05$ | DCL,JMR | 2,273 |
| 29 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p32 | $2010-04-05$ | DCL,JMR | 1,818 |


| $\frac{\text { No. de }}{\text { Muestra }}$ | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | Analysis <br> Date: | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p36 | $2010-04-01$ | UBM | 0,0781 |
| 29 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p36 | $2010-04-01$ | UBM | 0,0794 |

$* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$

It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s).

The results that appear in this report belong solely to (s) shows (s) analyzed (s).

Report No.: MX10-0726 Date: 2010-05-05

Metallic samples
Flow char for samples: 28, 29


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

Blvd. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec

Report No.: MX10-0726
Date: 2010-05-07

MX10-0726-29


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

## RESULTS REPORT

# INTERTEK TESTING SERVICES 

 DE MEXICO SA DE CV
## LABORATORIO CD. DE MEXICO

## TEST REPORT

## APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Mtz. 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila, 26070
Ing. Mario Falcón

## SAMPLE DESCRIPTION

One (1) group of submitted samples said to be :
Sample Description NP
Item No.
11) No. Parte 927-292 Serie TLS/KLKR

Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2010-04-13
Testing period $\quad 2010-04-19$ to 2009-05-22


## TEST CONDUCTED

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

CONCLUSION

|  | Testing item | Conclusion | Failed component | Failed result |
| :---: | :---: | :---: | :---: | :---: |
| 11 | No. Parte 927-292 Serie | Pass | --- | -- |

## TEST CONDUCTED

One (1) group of submitted samples said to be :
11) No. Parte 927-292 Serie TLS/KLKR

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) | Limit |
| :--- | :---: | :---: |
|  | $(11)$ |  |
| Cadmium (Cd) content | ND | $0,1 \%(1000 \mathrm{ppm})$ |
| Lead $(\mathrm{Pb})$ content | 190,0 | $0,1 \%(1000 \mathrm{ppm})$ |
| Mercury $(\mathrm{Hg})$ content | ND | $0,1 \%(1000 \mathrm{ppm})$ |
| Chromium $(\mathrm{VI})\left(\mathrm{Cr}^{6+}\right)$ | ND | 0 |

$\mathrm{ppm}=$ parts per million based on dry weight of sample.
$\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter.
$\mathrm{mg} / \mathrm{kg}$ WITH $50 \mathrm{~cm}^{2}=$ 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 $\Omega$.
Prepared and checked by :


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

Report No.: MX10-0867-Serie TLS/KLKR Date : 2010-05-31

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 $\mathrm{Cr}(\mathrm{VI})$ COATING. IT IS THE $\mathrm{Cr}(\mathrm{VI})$ 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 MX10-0867-11 WERE TESTED TOGETHER

Test method :

| No. de Muestra | Testing item |  | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\begin{gathered} \text { Analysis } \\ \text { Date: } \\ \hline \end{gathered}$ | Analyzed By: | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chromium . $\left(\mathrm{Cr}^{6+}\right)$ content |  | With reference to USEPA 3060, by EPA 7196 | BEQ160p5b | 2010-04-24 | MELA | 1,0 |


| $\frac{\text { No. de }}{\text { Muestra }}$ | Testing item | . | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | Lead $(\mathrm{Pb})$ content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | $2010-04-22$ | JMR,DCL | 5,319 |


| No. de <br> Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting }}{\text { limit ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 2,128 |


| No. de <br> Muestra | Testing item |  | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p44 | $2010-04-20$ | UBM | 0,0725 |

Metallic samples
Flow chart for samples: 11


## MX10-0867-11



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

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

| Sample Description | $:$ | LEAD |
| :--- | :--- | :--- |
| Style/ltem No. | $:$ | $882-800$ |
| Facility | $:$ | POWERGARD |
| Sample Receiving Date | $:$ | $2007 / 06 / 04$ |
| Testing Period | $:$ | $2007 / 06 / 04$ TO 2007/06/07 |

Test Requested

Test Method
: In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.
: With reference to IEC 62321, Ed. 1 111/54/CDV Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products.
(1) Determination of Cadmium by ICP-AES.
(2) Determination of Lead by ICP-AES.
(3) Determination of Mercury by ICP-AES.
(4) Determination of Hexavalent Chromium for metallic samples by Spot test / Colorimetric Method.

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


800 E. NORTHWEST HWY. DES PLAINES, IL 60016

Test results by chemical method (Unit: mg/kg)

| Test Item (s): | Method <br> (Refer to) | Result |  | MDL |
| :--- | :---: | :---: | :---: | :---: |
|  |  | No.2 |  |  |
| Cadmium (Cd) | $(1)$ | n.d. | -- | 2 |
| Lead (Pb) | $(2)$ | 13 | -- | 2 |
| Mercury (Hg) | $(3)$ | n.d. | -- | 2 |
| Hexavalent Chromium Cr(VI) by Spot test $/$ <br> boiling water extraction | $(4)$ | -- | Negative | See Note 5 |

## TEST PART DESCRIPTION:

```
NO. 1
SILVER COLORED METAL
NO. 2 : PLATING LAYER OF SILVER COLORED METAL
```

Note: $1 . \mathrm{mg} / \mathrm{kg}=\mathrm{ppm}$
2. n.d. = Not Detected
3. MDL $=$ Method Detection Limit
4. "--" = Not Conducted
5. Spot-test:

Negative $=$ Absence of $\mathrm{Cr}(\mathrm{VI})$ coating / surface layer, Positive = Presence of $\mathrm{Cr}(\mathrm{VI})$ coating / surface layer;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Boiling-water-extraction:
Negative $=$ Absence of $\mathrm{Cr}(\mathrm{VI})$ coating / surface layer.
Positive = Presence of $\mathrm{Cr}(\mathrm{VI})$ coating / surface layer;
the detected concentration in boiling-water-extraction solution is equal or greater than $0.02 \mathrm{mg} / \mathrm{kg}$ with $50 \mathrm{~cm}^{2}$ sample surface area.

800 E. NORTHWEST HWY. DES PLAINES, IL 60016

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr6+ test method excluded)
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Daniel Yeh


** End of Report **

## RESULTS REPORT

# INTERTEK TESTING SERVICES DE MEXICO SA DE CV 

## LABORATORIO CD. DE MEXICO

DELIVER TO:<br>Littelfuse, S.A. de C.V.<br>Blvd. Fausto Z. Mtz. 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila, 26070

ATTENTION: Ing. Mario Falcón

## TEST REPORT

## APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z. Mtz. 1800, Col. Magisterio Sección 38, Piedras Negras, Coahuila, 26070
Ing. Mario Falcón

## SAMPLE DESCRIPTION

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

## Sample Description NP

1) No. Parte 084215 Serie 155
2) No. Parte $878-112$ Serie 150
3) No. Parte 878-114 Serie 150
4) No. Parte 084113 Serie 155
5) No. Parte $01500284 Z$ Serie FHM and 153
6) No. Parte 878-113 Serie 155
7) No. Parte L600601C Descrip: ACS 600V Class
8) No. Parte 155004-4 Serie $155 \times X X X 2 \times A$
9) L 60060 C
10) No. Parte 909-410 Serie FLM
11) No. Parte 927-292 Serie TLS/KLKR

Item No.
12) No. Parte 079040 Serie FLM
13) No. Parte $01000054 Z$ Serie 100
14) No. Parte $01000057 Z$ Serie 100
15) No. Parte 927-027 Serie FLM/KLKR
16) No. Parte 155004-3 Serie $155 \times X X X 2 X A$
17) No. Parte 01000058 Z Serie 100
18) No. Parte 079055 Serie BLN
19) No. Parte 923-089 Serie CCMR/KLKR/FLQSLC
20) No. Parte $01000056 Z$ Serie 100
21) No. Parte 087244 Serie CCMP,FLQ,KLDR
22) No. Parte 087293 Serie FLQ
23) No. Parte 090190 Serie KLKR/FLQ/APT
Country of Origin NP
Buyer's Name NP

Supplier's Name NP
Date sample received 2010-04-13
Testing period 2010-04-19 to 2009-05-22

## TEST CONDUCTED

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

## CONCLUSION

|  | Testing item | Conclusion | Failed component | Failed result |
| :---: | :---: | :---: | :---: | :---: |
| 1 | No. Parte 084215 Serie 155 | Pass <br> See Result summary | - | - |
| 2 | No. Parte 878-112 Serie 150 | Pass <br> See Result summary | - | -- |
| 3 | No. Parte 878-114 Serie 150 | Pass <br> See Result summary | - | - |
| 4 | No. Parte 084113 Serie 155 | Pass <br> See Result summary | - | - |
| 5 | No. Parte $01500284 Z$ Serie FHM and 153 | Pass <br> See Result summary | - | -- |
| 6 | No. Parte 878-113 Serie 155 | Pass <br> See Result summary | - | - |
| 7 (a), (b), (c), (e), (f) | No. Parte L600601C Descrip: ACS 600 V Class | Pass <br> See Result summary | - | - |
| (7d) | III tornillo 2c (tornillo grueso metảlico con aluminio | Failed <br> See Result summary | Lead | 2897 mg/kg |
| 8 | No. Parte 155004-4 Serie 155XXXX2XA | Pass <br> See Result summary | - | - |
| 9 | L60060C | Pass <br> See Result summary | -- | - |
| 10 | No. Parte 909-410 Serie FLM | Pass <br> See Result summary | - | - |
| 11 | No. Parte 927-292 Serie TLSIKLKR | Pass <br> See Result summary | - | - |
| 12 | No. Parte 079040 Serie FLM | Pass See Result summary | - | - |
| 13 | No. Parte 01000054Z Serie 100 | Pass <br> See Result summary | $\rightarrow$ | - |
| 14 | No. Parte 010000572 Serie 100 | Pass <br> See Result summary | - | - |
| 15 | No. Parte 927-027 Serie FLM/KLKR | Pass <br> See Result summary | -- | - |

Report No MX10-0867
Date : 2010-05-31

## CONCLUSION

$\left.\begin{array}{|c|c|c|c|c|}\hline & \text { Testing item } & \text { Conclusion } & \text { Failed component } & \text { Failed result } \\ \hline 16 & \begin{array}{c}\text { No. Parte 155004-3 Serie } 155 \\ \text { XXXX2XA }\end{array} & \begin{array}{c}\text { Pass } \\ \text { See Result summary }\end{array} & - & - \\ \hline 17 & \text { No. Parte 01000058Z Serie } 100 & \begin{array}{c}\text { Pass } \\ \text { See Result summary }\end{array} & - & - \\ \hline 18 & \text { No. Parte 079055 Serie BLN } \\ \text { No. Parte 923-089 Serie } \\ \text { CCMR/KLKR/FLQSLC }\end{array} \quad \begin{array}{c}\text { Pass } \\ \text { See Result summary } \\ \text { See Result summary }\end{array}\right)$

## TEST CONDUCTED

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

1) No. Parte 084215 Serie 155
2) No. Parte 878-112 Serie 150
3) No. Parte 878-114 Serie 150

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1a) | (1b) | (2a) | (2b) | (3a) | (3b) |  |
|  | Insulator | metal | Insulator | metal | Insulator | metal |  |
| Cadmium ( Cd ) content | ND | ND | ND | ND | ND | ND | 0.01\% (100 ppmi |
| Lead (Pb) content | ND | 8,402 | ND | 9,026 | ND | 9,094 | 0,1\% (1000 ppmi) |
| Mercury ( Hg ) content | ND | ND | ND | ND | ND | 0,2594 | $0,1 \% \% 11000$ ppmil |
| Chromium (VI) $\left(\mathrm{Cr}^{6+}\right)$ | ND | ND | 2,080 | 2,080 | 2,356 | 2,208 | 0,1\% (1000 ppmi |
| POLYBROMINATED BIPHENYLS (PBBS) | ND | - | ND | - | ND | - |  |
| 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 | - | - |
| $\begin{aligned} & \text { POLYBROMINATED DIPHENYL } \\ & \text { ETHERS (PBDES) } \end{aligned}$ | ND | - | ND | - | ND | - |  |
| 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 | - | - |

## TEST CONDUCTED

One (1) group of submitted samples said to be :
4) No. Parte 084113 Serie 155
5) No. Parte $01500284 Z$ Serie FHM and 153
6) No Parte 878-113 Serie 155

TEST RESULT SUMMARY FOR ROHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  |  |  |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (4a) | (4b) | (5a) ** | (5b) | (5c) ** | (5d) | (6a) | (6b) |  |
|  | Insulator | metal | Insulator (Black plastic) | Wire (wire of copper) | Insulator <br> (Black <br> insulator) | Wire (metal part of the copper fuse) | Insulator | metal |  |
| Cadmium (Cd) content | ND | ND | ND | ND | ND | ND | ND | ND | $0.01 \%(1000 \mathrm{ppmi})$ |
| Lead ( Pb ) content | ND | 9,571 | ND | 8,970 | ND | 21,61 | ND | 9,199 | 0,1\% (1000 ppm) |
| Mercury ( Hg ) content | ND | ND | ND | ND | ND | ND | ND | ND | $0.1 \%$ (1000 ppm) |
| Chromium (VI) ( $\mathrm{Cr}^{6+}$ ) | 2,182 | ND | ND | ND (\&) | ND | ND (\&) | ND | ND | 0.1\% (1000 ppm $)$ |
| POLYBROMINATED BIPHENYLS (PBBs) | ND | -- | ND ** |  |  |  | ND |  |  |
| 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 (PEDES) | ND | - | ND |  |  |  | ND |  |  |
| Monobromodiphenyl (MonoBDE) | ND | --- | ND |  |  |  | ND |  | $\cdots$ |
| Dibromodiphenyl (DiBDE) | ND | -- | ND |  |  |  | ND |  | - |
| Tribromodiphenyl (TriBDE) | ND | --- | ND |  |  |  | ND |  | - |
| Tetrabromodiphenyl (TetraBDE) | ND | -- | ND |  |  |  | ND |  | - |
| Pentabromodiphenyl (Penta8DE) | 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 |  | - |

(\&) NOTE: Composite sample was analyzed.
TEST CONDUCTED
One (1) group of submitted samples said to be :
7) No. Parte L600601C Descrip: ACS 600 V Class

TEST RESULT SUMMARY FOR ROHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (7a) | (7b) | (7c) | (7d) | (7e) | (7f) |  |
|  | Metal e (silver metal) | I metal b (silver-blue metal) | 11 Screw (small screw, silver metal) | III Screw (thickness screw metal) | IV Cube Metallic with aluminum) | Frame plastic |  |
| Cadmium (Cd) content. | ND | 50,755 | 47,833 | ND | ND | ND | 0,0\%\% (100 ppme |
| Lead (Pb) content | 18,22 | ND | 8,91 | 2897 | 8,363 | ND | 0, $1 \%$ (10000 ppm) |
| Mercury ( Hg ) content | ND | ND | ND | ND | ND | ND | $0, \% \%$ (1000 ppm) |
| Chromium (VI) ( $\mathrm{Cr}^{6+}$ ) | ND (\&) |  |  |  |  | ND | $0,1 \%(1000 \mathrm{ppm} /$ |
| POLYBROMINATED BIPHENYLS (PBBs) | $\square$ | = | -r | - | $\square$ | ND | 0.19\% (10) |
| Monobromobiphenyl (MonoBB) | -- | $\rightarrow$ | -- | - | - | 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 | - |
| POL YBRDMINATED DIPHENFL ETHERE (PEDES) | - | - | - | - | - | ND | Q. |
| Mionobromodiphenyl (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) | -- | - | -- | $\cdots$ | - | ND |  |
| Decabromodiphenyl (DecaBDE) | --- | -- | - | - | - | ND | - |

(\&) NOTE: Composite sample was analyzed.

## TEST CONDUCTED

One (1) group of submitted samples said to be :
8) No. Parte 155004-4 Serie 155XXXX2XA
9) L60060C

[^2]10) No. Parte 909-410 Serie FLM

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: |
|  | (8) | (9) | (10) |  |
| Cadmium (Cd) content | ND | ND | ND | 0,01\% (100 ppmi) |
| Lead ( Pb ) content | ND | ND | ND | 0. $\%$ \% (1000 ppm) |
| Mercury ( Hg ) content | ND | ND | ND | 0,1\% (1000 ppm) |
| Chromium (VI) ( $\mathrm{Cr}^{6+}$ ) | ND | ND | ND | $0.1 \%$ (1000 ppm) |
| POLYBROMINATED BIPHENYKS (PBBS) | ND | ND | ND | $0.158(1000$ ppmen |
| 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 |  |
| 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 | - |

## TEST CONDUCTED

One (1) group of submitted samples said to be :
11) No. Parte 927-292 Serie TLS/KLKR
12) No. Parte 079040 Serie FLM

[^3]13) No. Parte $01000054 Z$ Serie 100
14) No. Parte $01000057 Z$ Serie 100
15) No Parte 927-027 Serie FLM/KLKR

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | S R RESULT (ppm) |  |  |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (11) | (12) | (13) | (14) | (15) |  |
| Cadmium (Cd) content | ND | ND | ND | ND | ND | 0,01\% (ieo ppm) |
| Lead (Pb) content | 190, 0 | 14,33 | 88,29 | 24,26 | 175,2 | \%, $1 \%$ \% 10000 pmm ) |
| Mercury ( Hg ) content | ND | ND | ND | ND | ND | 0.18 (1000 ppmi) |
| Chromium (VI) ( $\mathrm{Cr}^{6+}$ ) | ND | ND | ND | ND | ND |  |

## TEST CONDUCTED

One (1) group of submitted samples said to be :
16) No. Parte 155004-3 Serie 155 XXXX2XA
17) No. Parte $01000058 Z$ Serie 100
18) No. Parte 079055 Serie BLN
19) No. Parte 923-089 Serie CCMR/KLKR/FLQSLC
20) No. Parte 01000056 Z Serie 100

TEST RESULT SUMMARY FOR ROHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (16) | (17) | (18) | (19) | (20) |  |
| Cadmium ( Cd ) content | 49,54 | ND | ND | 5,39 | ND | 0,01\% (100 ppm) |
| Lead (Pb) content | 9,47 | 54,47 | 31,62 | 3149 | 61,02 | 0,1\% (1000 pmm) |
| Mercury ( Hg ) content | ND | ND | ND | ND | ND | 0,1\% (1000 pmm) |
| Chromium (VI) $\left(\mathrm{Cr}^{6+}\right)$ | 2,912 | 2,648 | ND | ND | 2,408 |  |

## TEST CONDUCTED

One (1) group of submitted samples said to be:
21) No. Parte 087244 Serie CCMP,FLQ,KLDR
22) No. Parte 087293 Serie FLQ
23) No. Parte 090190 Serie KLKR/FLQ/APT

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | Report No: MX10-0867 Date : 2010-05-31 |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: |
|  | (21) $\Omega$ RESULT (ppm) |  |  |  |
|  |  |  |  |  |
| 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) ( $\mathrm{Cr}^{6+}$ ) | 2,144 | 2,152 | ND | 0,1\% (1000 ppm) |
| POLYBROMINATED EIPHENYLS (PBES) | ND | ND | - |  |
| Monobromobiphenyl (MonoBB) | ND | ND | - | -- |
| Dibromobiphenyl (DiBB) | ND | ND | $\cdots$ | - |
| 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) | ND | ND | -- | $0.14 \%$ (1000 ppmi) |
| 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 | $\cdots$ | - |
| Decabromodiphenyl (DecaBDE) | ND | ND | -- | - |
|  |  |  |  |  |

$\mathrm{ppm}=$ parts per million based on dry weight of sample.
$\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter.
$\mathrm{mg} / \mathrm{kg}$ VVITH $50 \mathrm{~cm}^{2}=$ milligram per kilogram with 50 square centimeter.
$<=$ less than.
$N D=$ 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 $\Omega$.
Prepared and checked by :
For Intertek

Laboratory Manager
The Official Mexican Standard NOM-008-SCFL-1993 establishes like separator decimal the comma (1).

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 $\mathrm{Cr}(\mathrm{VI})$ COATING. IT IS THE $\mathrm{Cr}(\mathrm{VI})$ 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 MX10-0867-1 WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-2 WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-3 WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-4 WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-5 WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-6 WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE M $\mathrm{M} 10-0867-7$ WERE TESTED SEPARATELY.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE _MX10-0867-8 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-9 WERE TESTED TOGETHER

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-10 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE _MX10-0867-11 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-12 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-13 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-14 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-15 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-16 WERE TESTED TOGETHER:

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-17 WERE TESTED TOGETHER,

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-18 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-19 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-20 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-21 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-22 WERE TESTED TOGETHER:

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0867-23 WERE TESTED TOGETHER.

## Test method :

| No. de <br> Muestra | Testing item |  | $\Omega$ Testing method | Quality control Batch: | Analysis Date: | Analyzed <br> By: | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chromium $\left(\mathrm{Cr}^{\mathrm{B+}}\right)$ content |  | With reference to USEPA 3060, by EPA 7196 | BEQ160p5b | 2010-04-24 | MELA | $\begin{gathered} 2,01 \\ 1,0^{*} \text { (Sample 19) } \end{gathered}$ |


| No. de <br> Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | Analyzed <br> By: | Reporting limit <br> ppm |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
|  | POLYBROMINAT <br> ED BIPHENYLS <br> (PBBs) | With reference to USEPA <br> $3540 C$, by solvent extraction <br> and determined by GC-MSD | $2010-004440-\mathrm{P}$ <br> CL | $2010-05-22$ | CONT | 50 |
|  | POLYBROMINAT <br> ED DIPHENYL <br> ETHERS (PBDEs) | With reference to USEPA <br> $3540 C$, by solvent extraction <br> and determined by GC-MSD | 2010-004440-P <br> CL | $2010-05-22$ | CONT | 50 |


| No. de <br> Muestra | Testing item | $\Omega$ Testing method | Quality control <br> Batch: | Analysis: <br> Date: | Analyzed <br> By: | Reporting <br> limit ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Report No: MX10-0867

Date: 2010-05-31

| 1 (a) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 4,807 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (b) | Lead (Pb) content | With reference to USEPA 3050 MOD , by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 4,902 |
| 2 (a) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 5,0 |
| 2 (b) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 4.808 |
| 3 (a) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 4,717 |
| 3 (b) | Lead (Pb) content | With reference to USEPA 3050 MOD , by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 4,717 |
| 4 (a) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 4.717 |
| 4 (b) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 4,902 |
| 5 (a) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 5,0 |
| 5 (b) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 5,0 |
| 5 (c) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 4,630 |
| 5 (d) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 5,319 |
| 6 (a) | Lead ( Pb ) content | With reference to USEPA 3052MOD, by EPA 6010 | MET $2010-4 \mathrm{p} 51$ | 2010-04-22 | JMR, DCL | 4,808 |
| 6 (b) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 5,0 |
| 7 (a) | Lead ( Pb ) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-23 | JMR, DCL | 5,102 |
| 7 (b) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 7420 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 9,43 |
| 7 (c) | Lead ( Pb ) content | With reference to USEPA 3050MOD, by EPA 7420 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 5,55 |
| 7 (d) | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 1,462 |
| 7 (e) | Lead ( Pb ) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 0,887 |
| 7 (f) | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 4,808 |
| 8 | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 5,102 |
| 9 | Lead ( Pb ) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 4,90 |
| 10 | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 4,464 |
| 11 | Lead ( Pb ) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 5,319 |
| 12 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 4,808 |
| 13 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p4T | 2010-04-22 | JMR, DCL | 5.435 |
| 14 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47.48 | 2010-04-22 | JMR, DCL | 4,098 |
| 15 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR, DCL | 5,0 |
| 16 | Lead ( Pb ) content | With reference to USEPA 3050 MOD , by EPA 7420 | MET2010-4p47.48 | 2010-04-23 | MARY VLM | 6,85 |
| 17 | Lead ( Pb ) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47.48 | 2010-04-22 | JMR, DCL | 5.102 |
| 18 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR, DCL | 4,901 |
| 19 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR, DCL | 0,443 |
| 20 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 48 | 2010-04-22 | JMR, DCL | 5,319 |
| 21 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 4,630 |
| 22 | Lead (Pb) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 4,717 |
| 23 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p49 | 2010-04-22 | JMR,DCL | 5,0 |


| No. de <br> Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | Analysis <br> Date: | Analyzed <br> By: | $\frac{\text { Reporting }}{\text { limit ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (a) | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | $2010-04-22$ | JMR,DCL | 1,92 |


|  | Report No MX10-0867 <br> Date: 2010-05-31 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 (b) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 1,961 |
| 2 (a) | Cadmium(Cd) content | With reference to USEPA 3052 MOD , by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 2,0 |
| 2 (b) | Cadmium(Cd) content. | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 1,92 |
| 3 (a) | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 1,89 |
| 3 (b) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 1,887 |
| 4 (a) | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 1,89 |
| 4 (b) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 1,961 |
| 5 (a) | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 2,0 |
| 5 (b) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 2,0 |
| 5 (c) | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 1,85 |
| 5 (d) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 2,128 |
| 6 (a) | Cadmium( Cd ) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 1.923 |
| 6 (b) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 2,0 |
| 7 (a) | Cadmium( Cd ) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-23 | JMR,DCL | 2,041 |
| 7 (b) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 1,886 |
| 7 (c) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 3010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 1,111 |
| 7 (d) | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR, DCL | 0,585 |
| 7 (e) | Cadmium(Cd) content. | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 0,365 |
| 7 (f) | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR.DCL | 1.923 |
| 8 | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 2.04 |
| 9 | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 1,96 |
| 10 | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 1.786 |
| 11 | Cadmum(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 2,128 |
| 12 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 1,923 |
| 13 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47 | 2010-04-22 | JMR,DCL | 2,174 |
| 14 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR.DCL | 1,64 |
| 15 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47.48 | 2010-04-22 | JMR,DCL | 2,0 |
| 16 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 7420 | MET2010-4p47,48 | 2010-04-23 | MARY, VLM | 1,37 |
| 17 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47.48 | 2010-04-22 | JMR,DCL | 2,04 |
| 18 | Cadmium( Cd ) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR.DCL | 1,96 |
| 19 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR,DCL | 0,178 |
| 20 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p47,48 | 2010-04-22 | JMR,DCL | 2,128 |
| 21 | Cadmium(Cd) content. | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR,DCL | 1,852 |
| 22 | Cadmium(Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p51 | 2010-04-22 | JMR, DCL | 1.887 |
| 23 | Cadmium(Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p49 | 2010-04-22 | JMR,DCL | 2,0 |


| No, de <br> Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1(\mathrm{a})$ | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p46 | $2010-04-20$ | UBM | 0.0806 |
| $1(\mathrm{~b})$ | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p44 | $2010-04-20$ | UBM | 0,082 |

Report No: MX10-0867
Date : 2010-05-31

| 2 (a) | Meroury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0833 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 (b) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0806 |
| 3 (a) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0833 |
| 3 (b) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0769 |
| 4 (a) | Meroury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0769 |
| 4 (b) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0847 |
| 5 (a) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7474 | MET2010-4p46 | 2010-04-20 | UBM | 0,0833 |
| 5 (b) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0806 |
| 5 (c) | Meroury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,082 |
| 5 (d) | Mercury ( Hg ) content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0847 |
| 6 (a) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0806 |
| 6 (b) | Meroury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0.082 |
| 7 (a) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0806 |
| 7 (b) | Meroury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0847 |
| 7 (c) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0556 |
| 7 (d) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0256 |
| 7 (e) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0633 |
| 7 (f) | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0806 |
| 8 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0833 |
| 9 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0794 |
| 10 | Mercury ( Hg ) content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0806 |
| 11 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0725 |
| 12 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0735 |
| 13 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0833 |
| 14 | Meroury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0781 |
| 15 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,082 |
| 16 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,082 |
| 17 | Mercury ( Hg ) content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0746 |
| 18 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7474 | MET2010-4p44 | 2010-04-20 | UBM | 0,082 |
| 19 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0088 |
| 20 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p44 | 2010-04-20 | UBM | 0,0806 |
| 21 | Mercury ( Hg ) content | With reference to USEPA 7471MOD, by EPA 7471 | MET2010-4p54 | 2010-04-22 | UBM | 0,083 |
| 22 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD , by EPA 7471 | MET2010-4p46 | 2010-04-20 | UBM | 0,0781 |
| 23 | Mercury ( Hg ) content | With reference to USEPA 7471 MOD, by EPA 7471 | MET2010-4p50 | 2010-04-20 | UBM | 0,083 |

## 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 Secc. 38, Piedras Negras, Coahuila, C.P. 26070

ATTENTION: Ing. Mario Alberto Falcón

[^4]Report No.: MX10-0726-MOD - Serie KLDR
Date : 2010-05-07

## TEST REPORT

## APPLICANT

Littelfuse, S.A. de C.V.
Blvd. Fausto Z Mtz. 1800, Col. Magisterio Secc. 38, Piedras Negras, Coahuila, C.P. 26070

Ing. Mario Alberto Falcón

## SAMPLE DESCRIPTION

One (1) group of submitted samples said to be:
Sample Description NP
19) Serie KLDR Element 082649
20) Serie KLDR Cap 923-080
21) Serie KLDR Rejection Cap 923-088
22) Serie KLDR Element 082149

Item No.
23) Serie KLDR Cap Solder 927-293
24) Serie KLDR Disc 882-363-001
25) Serie KLDR Solder 692532
26) Serie KLDR/FLQ Element 082384
27) Serie KLDR Filler silica 090169

| Country of Origin | NP |
| :--- | :--- |
| Buyer's Name | NP |
| Supplier's Name | NP |
| Date sample received | $2010-03-25$ |
| Testing period | $2010-03-29$ to 2010-04-23 |

It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible ( $s$ ).

The results that appear in this report belong solely to (s) shows (s) analyzed (s).
Intertek Testing Services de México, S.A. de C.V.

Report No.: MX10-0726-MOD - Serie KLDR
Date : 2010-05-07

## TEST CONDUCTED

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

## CONCLUSION

| Testing item | Conclusion | Failed component | Failed result |
| :---: | :---: | :---: | :---: |
| Serie KLDR Element 082649 | Pass <br> See Result summary | --- | ---" |
| Serie KLDR Cap 923-080 | Pass <br> See Result summary | --- | --- |
| Serie KLDR Rejection Cap $923-088$ | failed <br> See Result summary | Cadmium Lead | $\begin{gathered} 2284 \mathrm{mg} / \mathrm{kg} \\ 12380,0 \mathrm{mg} / \mathrm{kg} \end{gathered}$ |
| Serie KLDR Element 082149 | Pass <br> See Result summary | --- | ---- |
| Serie KLDR Cap Solder 927-293 | Pass <br> See Result summary | --- | --- |
| Serie KLDR Disc 882-363-001 | Pass <br> See Result summary | --- | --- |
| Serie KLDR Solder 692532 | Pass <br> See Result summary | --- | --- |
| Serie KLDR/FLQ Element 082384 | Pass <br> See Result summary | --- | --- |
| Serie KLDR Filler silica 090169 | Pass <br> See Result summary | --- | --- |



[^5]www.intertek.com

## TEST CONDUCTED

One (1) group of submitted samples said to be :
19) Serie KLDR Element 082649
20) Serie KLDR Cap 923-080
21) Serie KLDR Rejection Cap 923-088
22) Serie KLDR Element 082149
23) Serie KLDR Cap Solder 927-293
24) Serie KLDR Disc 882-363-001
25) Serie KLDR Solder 692532
26) Serie KLDR/FLQ Element 082384
27) Serie KLDR Filler silica 090169

## TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  | Limit |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{( 1 9 )}$ | $\mathbf{( 2 0 )}$ | $\mathbf{( 2 1 )}$ | $\mathbf{( 2 2 )}$ |  |
| Cadmium (Cd) content | ND | ND | 2284,0 | ND | $0,01 \%(100 \mathrm{ppm})$ |
| Mercury (Hg) content | ND | ND | ND | ND | $0,1 \%(1000 \mathrm{ppm})$ |
| Lead (Pb) content | ND | 1,106 | 12380,0 | ND | $0,1 \%(1000 \mathrm{ppm})$ |
| Chromium (VI) $\left(\mathrm{Cr}^{6+}\right)$ | ND | ND | ND | ND | $0,1 \%(1000 \mathrm{ppm})$ |


| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  | Limit |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{( 2 3 )}$ | $\mathbf{( 2 4 )}$ | $\mathbf{( 2 5 )}$ |  |
| Cadmium (Cd) content | ND | ND | ND | $0,01 \%(100 \mathrm{ppm})$ |
| Mercury (Hg) content | 0,0776 | 0,2297 | ND | $0,1 \%(1000 \mathrm{ppm})$ |
| Lead $(\mathrm{Pb})$ content | 212,2 | 65,24 | 142,2 | $0,1 \%(1000 \mathrm{ppm})$ |
| Chromium (VI) $\left(\mathrm{Cr}^{6+}\right)$ | ND | ND | ND | $0,1 \%(1000 \mathrm{ppm})$ |


| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | (26) | $\mathbf{( 2 7 )}$ |  |  |
| Cadmium (Cd) content | ND |  | ND |  |
| Mercury (Hg) content | ND |  | ND |  |
| Lead (Pb) content | ND |  | ND |  |
| Chromium (VI) $\left(\mathrm{Cr}^{6+}\right)$ | ND | $0,1 \%(100 \mathrm{ppm})$ |  |  |

$\mathrm{ppm}=$ parts per million based on dry weight of sample.
$\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter.
$\mathrm{mg} / \mathrm{kg}$ WITH $50 \mathrm{~cm}^{2}=$ 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 $\Omega$.

Prepared and checked by :


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 $\mathrm{Cr}(\mathrm{VI})$ COATING. IT IS THE $\mathrm{Cr}(\mathrm{VI})$ CONCENTRATION DETECTED IN THE BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE $\mathrm{Cr}(\mathrm{VI})$ CONCENTRATION IN THE COATING LAYER OF THE SAMPLE.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0726-19 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0726-20 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0726-21 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0726-22 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0726-23 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-0726-24 WERE TESTED TOGETHER.


> It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de Mexico, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s).
> The results that appear in this report belong solely to (s) shows (s) analyzed (s).
> (LTA/003/GENS-F8
> 1at. Emisión Junio 2005, $1^{\circ}$ Revisión Junio 26, 2009.

Intertek Testing Services de México, S.A. de C.V.
Blvd. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec
C.P. 11650 , México, D.F. Tel.: 50912150 Fax: 55407863


REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 726-25 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 726-26 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 726-27 WERE TESTED TOGETHER.

## Test method :




Report No.: MX10-0726-MOD - Serie KLDR
Date : 2010-05-07

| No. de Muestra | Testing item | $\Omega$ Testing method | Quality control Batch: | Analysis Date: | $\begin{gathered} \frac{\text { Analyzed }}{\text { By: }} \end{gathered}$ | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL, JMR | 1,961 |
| 20 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL,JMR | 0,467 |
| 21 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL, JMR | 0,362 |
| 22 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL, JMR | 1,449 |
| 23 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL, JMR | 1,66 |
| 24 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL, JMR | 2,00 |
| 25 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p31 | 2010-04-05 | DCL, JMR | 1,785 |
| 26 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p32 | 2010-04-05 | DCL, JMR | 1,612 |
| 27 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p32 | 2010-04-05 | DCL, JMR | 1,562 |



| No. de Muestra | Testing item | $\Omega$ Testing method | Quality control Batch: | Analysis Date: | Analyzed By: | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0806 |
| 20 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0235 |
| 21 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0183 |
| 22 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0806 |
| 23 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0769 |
| 24 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0820 |
| 25 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p35 | 2010-04-01 | UBM | 0,0833 |
| 26 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p36 | 2010-04-01 | UBM | 0,0833 |
| 27 | Mercury ( Hg ) content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p36 | 2010-04-01 | UBM | 0,0833 |

********************************************************************

Report No.: MX10-0726
Date: 2010-05-05

Metallic samples
Flow char for samples: $19,20,21,22$,
23, 24, 25, 26, 27


[^6]Intertek Testing Services de México, S.A. de C.V.
Blvd. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec

## MX10-0726-27



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

No. : CE/2007/38230
Date : 2007/04/03
Page : 1 of 3
LITTELFUSE INC.
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
800 E NORTHWEST HIGHWAY DES PLAINES, IL 60016

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

| Sample Description | $:$ | DISC (70/30 BRASS) |
| :--- | :--- | :--- |
| Style/ltem No. | $:$ | $882-532$ |
| Facility | $:$ | POWER |
| Sample Receiving Date | $:$ | $2007 / 03 / 28$ |
| Testing Period | $:$ | $2007 / 03 / 28$ TO 2007/04/03 |

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method
: With reference to IEC 62321, Ed. 1 111/54/CDV Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products.
(1) Determination of Cadmium by ICP-AES.
(2) Determination of Lead by ICP-AES.
(3) Determination of Mercury by ICP-AES.
(4) Determination of Hexavalent Chromium for metallic samples by Spot test / Colorimetric Method.

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

Test results by chemical method (Unit: mg/kg)

| Test Item (s): | Method | Result | MDL |
| :--- | :---: | :---: | :---: |
|  | (Refer to) | No.1 |  |
| Cadmium $(\mathrm{Cd})$ | $(1)$ | n.d. | 2 |
| Lead $(\mathrm{Pb})$ | $(2)$ | 13 | 2 |
| Mercury $(\mathrm{Hg})$ | $(3)$ | n.d. | 2 |
| Hexavalent Chromium Cr(VI) by Spot test $/$ <br> boiling water extraction | $(4)$ | Negative | See Note 4 |

## IEST PART DESCRIPTION:

NO. 1 : GOLDEN COLORED METAL

Note: 1. $\mathrm{mg} / \mathrm{kg}=\mathrm{ppm}$
2. n.d. = Not Detected
3. MDL $=$ Method Detection Limit
4. Spot-test:

Negative $=$ Absence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer,
Positive $=$ Presence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer;
(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Boiling-water-extraction:
Negative $=$ Absence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer. Positive $=$ Presence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer; the detected concentration in boiling-water-extraction solution is equal or greater than $0.02 \mathrm{mg} / \mathrm{kg}$ with $50 \mathrm{~cm}^{2}$ sample surface area.

## Test Report


** End of Report **

## Test Report

No. : CE/2007/40619 Date : 2007/04/12 Page : 1 of 4

```
LITTELFUSE INC.
800 E. NORTHWEST HIGHWAY DES PLAINES, IL 60016
```

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

| Sample Description | $:$ | CAP |
| :--- | :--- | :--- |
| Style/ltem No. | $:$ | $898-013-001$ |
| Facility | $:$ | POWRGARD |
| Sample Receiving Date | $:$ | $2007 / 04 / 03$ |
| Testing Period | $:$ | $2007 / 04 / 03$ TO 2007/04/12 |

Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method
: With reference to IEC 62321, Ed. 1 111/54/CDV Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products.
(1) Determination of Cadmium by ICP-AES.
(2) Determination of Lead by ICP-AES.
(3) Determination of Mercury by ICP-AES.
(4) Determination of Hexavalent Chromium for metallic samples by Spot test / Colorimetric Method.

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


## Test Report

800 E. NORTHWEST HIGHWAY DES PLAINES, IL 60016

Test results by chemical method (Unit: $\mathrm{mg} / \mathrm{kg}$ )

| Test Item (s): | Method(Refer to) | Result |  | MDL |
| :---: | :---: | :---: | :---: | :---: |
|  |  | No. 1 | No. 2 |  |
| Cadmium (Cd) | (1) | n.d. | -- | 2 |
| Lead (Pb) | (2) | n.d. | -- | 2 |
| Mercury (Hg) | (3) | n.d. | -- | 2 |
| Hexavalent Chromium $\mathrm{Cr}(\mathrm{VI})$ by Spot test / boiling water extraction | (4) | -- | Negative | See Note 4 |

## IEST PART DESCRIPTION:

| NO. 1 | $:$ | SILVER COLORED METAL |
| :--- | :--- | :--- |
| NO. 2 | $:$ | PLATING LAYER OF SILVER COLORED METAL |

Note: 1. $\mathrm{mg} / \mathrm{kg}=\mathrm{ppm}$
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. Spot-test:

Negative $=$ Absence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer, Positive $=$ Presence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer; (The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)
Boiling-water-extraction:
Negative $=$ Absence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer.
Positive $=$ Presence of $\mathrm{Cr}(\mathrm{VI})$ coating $/$ surface layer;
the detected concentration in boiling-water-extraction solution is equal or greater than $0.02 \mathrm{mg} / \mathrm{kg}$ with $50 \mathrm{~cm}^{2}$ sample surface area.
5. "--" = Not Conducted

## Test Report

 No. : CE/2007/40619 Date : 2007/04/12
## LITTELFUSE INC.

800 E. NORTHWEST HIGHWAY DES PLAINES, IL 60016

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr6+ test method excluded)
2) Name of the person who made measurement: Troy Chang
3) Name of the person in charge of measurement: Daniel Yeh


## Test Report

LITTELFUSE INC.

800 E. NORTHWEST HIGHWAY DES PLAINES, IL 60016

** End of Report **

# RESULTS REPORT <br> INTERTEK TESTING SERVICES DE MEXICO SA DE CV LABORATORIO CD. DE MEXICO 

DELIVER TO:<br>Littelfuse, S.A. de C.V.<br>Poder Judicial No. 1005, Col. Burócratas, Piedras Negras, Coahuila, C.P. 26020

ATTENTION: Berenice Casas / Mario Falcón

## TEST REPORT

## APPLICANT

Littelfuse, S.A. de C.V.
Poder Judicial No. 1005, Col. Burócratas, Piedras Negras, Coahuila, C.P. 26020
Berenice Casas / Mario Falcón

## SAMPLE DESCRIPTION

One (1) group of submitted samples said to be :
Sample Description NP
19) P/N: 082342 Serie: SPF
28) P/N: 909-161 / 909-171 Serie: FLQ/SPF

Item No.
29) P/N: 901-182 Serie: KLKR/BLS
31) P/N: 087284 Serie: SPF

Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2010-04-20
Testing period $\quad$ 2010-04-29 to 2009-05-22
**********************************************************************************************

## TEST CONDUCTED

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

```
***********
```


## CONCLUSION

|  | Testing item | Conclusion | Failed component | Failed result |
| :---: | :---: | :---: | :---: | :---: |
| 19 | P/N: 082342 Serie: SPF | Pass <br> See Result summary | -- | --- |
| 28 | P/N: 909-161/909-171 Serie: <br> FLQ/SPF | Pass <br> See Result summary | --- | --- |
| 29 | P/N: 901-182 Serie: KLKR/BLS | Pass <br> See Result summary | -- | -- |
| 31 | P/N: 087284 Serie: SPF | Pass <br> See Result summary | --- | -- |

Report No.: MX10-0928-Serie SPF
Date : 2010-05-31

## TEST CONDUCTED

One (1) group of submitted samples said to be :
19) P/N: 082342 Serie: SPF
28) P/N: 909-161/909-171 Serie: FLQ/SP
29) P/N: 901-182 Serie: KLKR/BLS
31) P/N: 087284 Serie: SPF

TEST RESULT SUMMARY FOR RoHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  | Limit\# |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (19) | (28) | (29) | (31) |  |
| Cadmium (Cd) content | ND | ND | ND | ND | 0,01\% ( 100 ppm ) |
| Lead (Pb) content | ND | ND | ND | ND. | 0,1\% (1000 ppm) |
| Mercury ( Hg ) content | ND | ND | ND | ND | 0,1\% (1000 ppm) |
| Chromium (VI) ( $\mathrm{Cr}^{6+}$ ) | ND | ND | ND | ND | 0,1\% (1000 ppm) |
| POLYBROMINATED BIPHENYLS (PBBS) | -- | ND | ND | ND | 0,0\% (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 | $01 \%(1000 \mathrm{ppm})$ |
| 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 | --- |

$\mathrm{ppm}=$ parts per million based on dry weight of sample.
$\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter.
$\mathrm{mg} / \mathrm{kg}$ WITH $50 \mathrm{~cm}^{2}=$ 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 Accreditation only apply for the methods listed in such. Not accredited under EMA $\Omega$.
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 $\mathrm{Cr}(\mathrm{VI})$ COATING. IT IS THE Cr(VI) CONCENTRATION DETECTED IN TH E BOILING-WATER-EXTRACTION SOLUTION AND SHOULD NOT BE INTERPRETED AS THE $\mathrm{Cr}(\mathrm{VI})$ 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 928-19 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE _MX10 928-28 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 928-29 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10 928-31 WERE TESTED TOGETHER.

Report No.: MX10-0928-Serie SPF
Date : 2010-05-31

Test method :

| No. de Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\begin{gathered} \frac{\text { Analyzed }}{\text { By: }} \\ \hline \end{gathered}$ | $\begin{gathered} \frac{\text { Reporting limit }}{\mathrm{ppm}} \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chromium VI $\left(\mathrm{Cr}^{6+}\right)$ content | With reference to USEPA Panasonic (HACH), by EPA Panasonic (HACH) (Sample 1,4) <br> With reference to USEPA 3060, by EPA 7196 | $\begin{aligned} & \text { BAL827p85 } \\ & \text { BEQ160p5b } \end{aligned}$ | $\begin{gathered} \text { (Sample }(1,4) \\ 2010-05-04 \\ 2010-05-01,03 \end{gathered}$ | MELA, JLHS | $\begin{gathered} 0,020 \\ 2,0 \end{gathered}$ |


| No. de Muestra | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | Analysis Date: | Analyzed By: | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { POLYBROMINAT } \\ & \text { ED BIPHENYLS } \\ & \text { (PBBs) } \end{aligned}$ | Determined by GC-MSD | $\begin{gathered} 2010-004440-P \\ C L \end{gathered}$ | $\begin{aligned} & 2010-04-28 \\ & 2010-05-22 \end{aligned}$ | CONT | 50* |
|  | POLYBROMINAT <br> ED DIPHENYL <br> ETHERS (PBDEs) | Determined by GC-MSD | $\begin{array}{\|c} 2010-004440-P \\ C L \end{array}$ | $\begin{aligned} & 2010-04-28 \\ & 2010-05-22 \end{aligned}$ | CONT | 50* |


| $\frac{\text { No. de }}{\text { Muestra }}$ | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 19 | Lead (Pb) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p59 | $2010-04-29$ | MARY,DCL | 4,902 |
| 28 | Lead $(\mathrm{Pb})$ content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p60 | $2010-04-29$ | MARY,DCL | 4,717 |
| 29 | Lead $(\mathrm{Pb})$ content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p60 | $2010-04-29$ | MARY,DCL | 4,717 |
| 31 | Lead $(\mathrm{Pb})$ content | Wilh reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p60 | $2010-04-29$ | MARY,DCL | 4,902 |


| No. de Muestra | Testing item | $\Omega$ Testing method | Quality control Batch: | Analysis Date: | Analyzed By: | $\frac{\text { Reporting limit }}{\mathrm{ppm}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Cadmium (Cd) content | With reference to USEPA 3050MOD, by EPA 6010 | MET2010-4p59 | 2010-04-29 | MARY, DCL | 1,961 |
| 28 | Cadmium (Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p60 | 2010-04-29 | MARY,DCL | 1,887 |
| 29 | Cadmium (Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p60 | 2010-04-29 | MARY,DCL | 1,887 |
| 31 | Cadmium (Cd) content | With reference to USEPA 3052MOD, by EPA 6010 | MET2010-4p60 | 2010-04-29 | MARY,DCL | 1,961 |


| $\frac{\text { No. de }}{\text { Muestra }}$ | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-4p61 | $2010-04-30$ | UBM | 0,082 |
| 28 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-8p2 | $2010-04-30$ | UBM | 0,0746 |
| 29 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-8p2 | $2010-04-30$ | UBM | 0,0714 |
| 31 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-8p2 | $2010-04-30$ | UBM | 0,0794 |

Report No.: MX10-0928 Date: 2010-05-31

Metallic samples
Flow chart for samples: 19

Cr6


It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de Mexico, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s).

Report No.: MX10-0928
Date: 2010-05-31
Plastic samples
Flow chart for samples:
28, 29, 31


Report No.: MX10-0928
Date: 2010-05-31

## MX10-0928-28



Report No.: MX10-1602
Date : 2010-08-10

## TEST REPORT

## APPLICANT

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

## SAMPLE DESCRIPTION

One (1) group of submitted samples said to be :
Sample Description Serie APT

1) N.P. 924-145
2) $N P 080697$

Item No.
3) N.P. 685406
4) N.P. 900-143

Country of Origin NP
Buyer's Name NP
Supplier's Name NP
Date sample received 2010-07-26
Testing period 2010-07-29 to 2010-08-09


## 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. 924-145 | Pass <br> See Result summary | -- | -- |
| 2 | N.P. 080697 | Pass <br> See Result summary | --- | --- |
| 3 | N.P. 685406 | Pass <br> See Result summary | --- | --- |
| 4 | N.P. 900-143 | Pass <br> See Result summary | -- | --- |

[^7]
## TEST CONDUCTED

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

1) N.P. 924-145
2) N.P. 080697
3) N.P. 685406
4) N.P. 900-143

TEST RESULT SUMMARY FOR ROHS DIRECTIVE :

| TESTING ITEM | $\Omega$ RESULT (ppm) |  |  |  | Limit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |  |
| Cadmium (Cd) content | ND | ND | ND | ND | 0,01\% (100 ppm) |
| Lead ( Pb ) content | 199,5 | ND | ND | ND | 0,1\% (1000 ppm) |
| Mercury ( Hg ) content | ND | ND | ND | ND | 0,1\% (1000 ppm) |
| Chromium (VI) (Cr ${ }^{\text {5+ }}$ ) | ND | 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 | - | - | $\cdots$ | 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 | --- |

$\mathrm{ppm}=$ parts per million based on dry weight of sample.
$\mu \mathrm{g} / \mathrm{cm}^{2}=$ microgram per square centimeter.
$\mathrm{mg} / \mathrm{kg}$ WITH $50 \mathrm{~cm}^{2}=$ 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 $\Omega$.
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 $\mathrm{Cr}(\mathrm{VI})$ COATING. IT IS THE $\mathrm{Cr}(\mathrm{VI})$ 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 MX10-1602-1 WERE TESTED TOGETHER.

REMARK: AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-1602-2 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-1602-3 WERE TESTED TOGETHER.

REMARK : AS REQUESTED BY THE APPLICANT, COATING WITH BASE MATERIAL OF TESTED COMPONENTS OF THE SAMPLE MX10-1602-4 WERE TESTED TOGETHER.

Report No.: MX10-1602
Date : 2010-08-10

## Test method :

| $\frac{\text { Sample }}{\text { number }}$ | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-4$ | Chromium <br> content | VI $\left(\mathrm{Cr}^{6+}\right)$ | With reference to USEPA 3060, by <br> EPA 7196 | QHU2009-3p151 | $2010-07-31$ | JLHS |
| 2,0 |  |  |  |  |  |  |


| Sample <br> number | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | POLYBROMINATED <br> BIPHENYLS (PBBs) | Determined by GC-MSD | $2010-004616-P$ <br> CL | $2010-08-09$ | $\mathbf{C N T}$ | 50,0 |
| 4 | POLYBROMINATED <br> DIPHENYL ETHERS <br> (PBDEs) | Determined by GC-MSD | $2010-004616-P$ <br> CL | $2010-08-09$ | $\mathbf{A}$ <br> CONT | 50,0 |


| $\frac{\text { Sample }}{\text { number }}$ | Testing item | Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Lead $(\mathrm{Pb})$ content |  | MET2010-32p34 | $2010-08-03$ | DCL,JMR | 5,0 |
| 2 | Lead $(\mathrm{Pb})$ content | With reference to USEPA 3050-MOD, by EPA 6010 | MET2010-32p34 | $2010-08-03$ | DCL,JMR | 5,0 |
| 3 | Lead $(\mathrm{Pb})$ content | With reference to USEPA 3050-MOD, by EPA 6010 | MET2010-32p34 | $2010-08-03$ | DCL,JMR | 5,0 |
| 4 | Lead $(\mathrm{Pb})$ content | With reference to USEPA 3052, by EPA 6010 | MET2010-32p35 | $2010-08-03$ | DCL,JMR | 5,0 |


| Sample <br> number | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | $\frac{\text { Reporting limit }}{\text { ppm }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Cadmium (Cd) content | With reference to USEPA 3050-MOD, by EPA 6010 | MET2010-32p34 | $2010-08-03$ | DCL,JMR | 2,0 |
| 2 | Cadmium (Cd) content | With reference to USEPA 3050-MOD, by EPA 6010 | MET2010-32p34 | $2010-08-03$ | DCL,JMR | 2,0 |
| 3 | Cadmium (Cd) content | With reference to USEPA 3050-MOD, by EPA 6010 | MET2010-32p34 | $2010-08-03$ | DCL,JMR | 2,0 |
| 4 | Cadmium (Cd) content | With reference to USEPA 3052, by EPA 6010 | MET2010-32p35 | $2010-08-03$ | DCL,JMR | 2,0 |


| $\frac{\text { Sample }}{\text { number }}$ | Testing item | $\Omega$ Testing method | $\frac{\text { Quality control }}{\text { Batch: }}$ | $\frac{\text { Analysis }}{\text { Date: }}$ | $\frac{\text { Analyzed }}{\text { By: }}$ | Reporting limit <br> ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-32p40 | $2010-08-04$ | JAPM | 0,3 |
| 2 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-32p40 | $2010-08-04$ | JAPM | 0,3 |
| 3 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-32p40 | $2010-08-04$ | JAPM | 0,3 |
| 4 | Mercury $(\mathrm{Hg})$ content | With reference to USEPA 7471 by USEPA 7471 | MET2010-32p39 | $2010-08-04$ | JAPM | 0,3 |

Report No.: MX10-1602
Date: 2010-08-10

Metallic samples
Flow chart for samples: 1,2,3


No.: MX10-1602
Date: 2010-08-10
Plastic samples
Flow char for samples: 4



Intertek Testing Services de México, S.A. de C.V.
Blvd. Manuel Avila Camacho No. 182 Col. Lomas de Chapultepec
C.P. 11650, México, D.F. Tel.: 50912150 Fax 55407863


[^0]:    Remarks :

[^1]:    It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s).

    The results that appear in this report belong solely to (s) shows (s) analyzed (s).
    $1^{\text {a }}$. Emisión Junio 2005, $1^{\circ}$ Revisión Junio 26, $2009 . \quad$ ILTA/003/GENS-F8
    Intertek Testing Services de México, S.A. de C.V.
    Blvd. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec
    C.P. 11650, México, D.F. Tel.: 50912150 Fax: 55407863

[^2]:    It is protibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of intertak Testing Services de Mexico, SA, de C.V. On the contrary intertek reserves the nigh of corning from kegal form against hat (it is) they gre responsible is). The results that appear in this report belong solely to (s) shows (s) analyzed (s)

[^3]:    It is protibited the total or partial reproduction of this document, as well as any modification or aiteration in no of its parts without the previous authorization of intertak Testing Services de Mexico, SA de C.V. On the contrary Intertek reserves the nighl of coming from egal form against that (it is) they sie responslole is). The results that appear in this report belong solely to (s) shows (s) analyzed (s)

    Intertek Testing Services de México, S.A. de C.V. Blvd. Manuel Ávila Camacho No. 182 Col Lomas de C Chapultepec
    C.P. 11650, Mécico, D.F. Tel:- 50912150 Fax: 55407863

[^4]:    It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s)

    The results that appear in this report belong solely to (s) shows (s) analyzed (s).

    ## $1^{\text {a }}$. Emisión Junio 2005, $1^{\circ}$ Revisión Junio 26, 2009.

[^5]:    It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s)

    The results that appear in this report belong solely to (s) shows (s) analyzed (s).
    $1^{\text {a }}$. Emisión Junio 2005, $1^{\circ}$ Revisión Junio 26, 2009 .
    ILTA/003/GENS-F8
    Intertek Testing Services de México, S.A. de C.V.
    Blvd. Manuel Ávila Camacho No. 182 Col. Lomas de Chapultepec C.P. 11650, México, D.F. Tel.: 50912150 Fax: 55407863

[^6]:    It is prohibited the total or partial reproduction of this document, as well as any modification or alteration in no of its parts without the previous authorization of Intertek Testing Services de México, S.A. de C.V. On the contrary Intertek reserves the right of coming from legal form against that (it is) they are responsible (s). The results that appear in this report belong solely to (s) shows (s) analyzed (s).
    $1^{\text {a }}$. Emisión Junio 2005, $1^{\circ}$ Revisión Junio 26, $2009 . \quad$ ILTA/003/GENS-F8

[^7]:    in (hey C.V. On the contrary Intertek reserves the night of coming from legal form against that
    The results that appear in this report belong solely to $(\mathrm{s})$ shows $(\mathrm{s})$ analyzed (s).

