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Date: 2012/07/17

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NEW PRISMATIC ENTERPRISE CO., LTD.

NO. 4, ALLEY 27, LANE 195, YUNG FENG RD., TU-CHENG DISTRICT, NEW TAIPEI CITY 236, TAIWAN

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

Sample Description

THERMOCHROMIC PIGMENT 31C ORANGE

Color

: ORANGE

Sample Receiving Date

: 2012/07/12

**Testing Period** 

: 2012/07/12 TO 2012/07/17

Sample Submitted By

: NEW PRISMATIC ENTERPRISE CO., LTD.

**Test Requested** 

: As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted

**Test Method** 

With reference to IEC 62321: 2008.

Test Result(s) Conclusion

Please refer to next page(s). Based on the performed tests on submitted samples, the test results of Cadmium, Lead,

Mercury, Cr(VI), PBBs, PBDEs comply with the limits as set by RoHS Directive

2011/65/EU Annex II; recasting 2002/95/EC.

Ray Chang / Asst. Manage Signed for and on behalf of

SGS Taiwan Limited

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#### Test Result(s)

PART NAME No.1

THERMOCHROMIC PIGMENT 31C ORANGE

| Test Item(s)               | Unit  | Method  | MDL | Result<br>No.1 | Limit            |
|----------------------------|-------|---|-----|----------------|------------------|
| Cadmium (Cd)               | mg/kg | With reference to IEC 62321: 2008 and performed by ICP-AES. | 2   | n.d.           | 100              |
| Lead (Pb)                  | mg/kg | With reference to IEC 62321: 2008 and performed by ICP-AES. | 2   | n.d.           | 1000             |
| Mercury (Hg)               | mg/kg | With reference to IEC 62321: 2008 and performed by ICP-AES. | 2   | n.d.           | 1000             |
| Hexavalent Chromium Cr(VI) | mg/kg | With reference to IEC 62321: 2008 and performed by UV-VIS.  | 2   | n.d.           | 1000             |
| Sum of PBBs                | mg/kg |   | 7   | n.d.           | 1000             |
| Monobromobiphenyl          | mg/kg |   | 5   | n.d.           | •                |
| Dibromobiphenyl            | mg/kg | 7 . 4   | 5   | n.d.           | -                |
| Tribromobiphenyl           | mg/kg | 70, 76  | 5   | n.d.           | -                |
| Tetrabromobiphenyl         | mg/kg |   | 5   | n.d.           | -                |
| Pentabromobiphenyl         | mg/kg | 10,71,7   | 5   | n.d.           | -                |
| Hexabromobiphenyl          | mg/kg | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~                       | 5   | n.d.           |                  |
| Heptabromobiphenyl         | mg/kg |   | 5   | n.d.           |                  |
| Octabromobiphenyl          | mg/kg |   | 5   | n.d.           | -                |
| Nonabromobiphenyl          | mg/kg | 3/2/  | 5   | n.d.           | •                |
| Decabromobiphenyl          | mg/kg | With reference to IEC 62321: 2008 and                       | 5   | n.d.           | . <del>1</del> 2 |
| Sum of PBDEs               | mg/kg | performed by GC/MS.   | -   | n.d.           | 1000             |
| Monobromodiphenyl ether    | mg/kg | ĺ   | 5   | n.d.           | 120              |
| Dibromodiphenyl ether      | mg/kg |   | 5   | n.d.           | -                |
| Tribromodiphenyl ether     | mg/kg |   | 5   | n.d.           |                  |
| Tetrabromodiphenyl ether   | mg/kg | ľ   | 5   | n.d.           |                  |
| Pentabromodiphenyl ether   | mg/kg | ľ   | 5   | n.d.           |                  |
| Hexabromodiphenyl ether    | mg/kg |   | 5   | n.d.           | -                |
| Heptabromodiphenyl ether   | mg/kg |   | 5   | n.d.           |                  |
| Octabromodiphenyl ether    | mg/kg |   | 5   | n.d.           | -                |
| Nonabromodiphenyl ether    | mg/kg |   | 5   | n.d.           |                  |
| Decabromodiphenyl ether    | mg/kg |   | 5   | n.d.           |                  |

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#### Note:

1. mg/kg = ppm; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. " - " = Not Regulated

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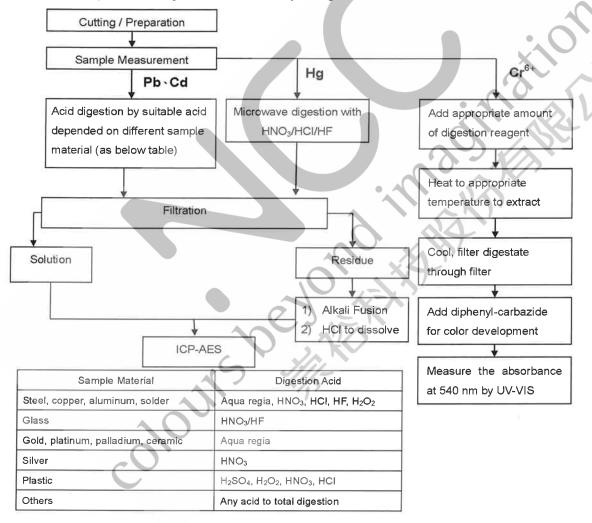
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- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr6+ test method excluded)
- 2) Name of the person who made measurement: Alex Chang
- 3) Name of the person in charge of measurement: Ray Chang



**Note\*\***: (1) For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.

(2) For metallic material, add pure water and heat to boiling.

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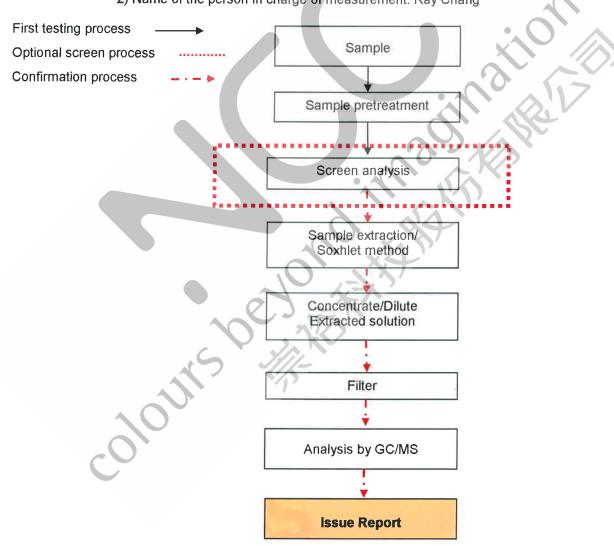
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### PBB/PBDE analytical FLOW CHART

1) Name of the person who made measurement: Anson Tsao

2) Name of the person in charge of measurement: Ray Chang



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\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

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End of Report

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