



CHEMICAL ANALYSIS TEST REPORT

Company : <u>APOGEE OPTOCOM Co., Ltd</u>

Address : 4F No.7, Nan-Ke 3rd Rd., Tainan Science Industrial Park,

Hsin-shi Dist., Tainan City, Taiwan(R.O.C.)

Product Name : 光學膜

Date Received : MAR 15, 2018

Date Tested : MAR 22, 2018

TESTING LABORATORY IS ACCREDITED BY:

IECQ ISO/IEC 17025 certificate of independent test laboratory approval

Certificate No.: T5-001

WE HEREBY CERTIFY THAT:

The test(s) shown in the attachment were conducted according to the indicating procedures. We assume full responsibility for the accuracy and completeness of these tests and vouch for the qualifications of all personnel performing them.

NOTE:

- 1. This report will be invalid if reproduced in part or altered in any way.
- 2. This report refers only to the specimen(s) submitted to test, and is invalid if used otherwise.
- 3. This report is ONLY valid with the examination seal and signature of this institute.
- 4. The tested specimen(s) will only be preserved for thirty days from the date issued, if not collected by the applicant.

Signed and on behalf of

Wenston lin

Wenston Lin Technical Manager





Sustainable Development Business Unit 1F, No.19, Pu-ding Rd., Hsin - chu City, Taiwan, R.O.C.

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1. GENERAL INFORMATION

1.1 DESCRIPTION OF SAMPLE

Product Name : 光學膜



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2. CHEMICAL ANALYSIS TEST

2.1 TEST CONDITIONS AND RESULTS

| *Description of test part:光學膜 | | | | | |
|-------------------------------|-----------------------------------|------------|--------|-----|--------|
| Test Item(s) | Method | Instrument | Unit | MDL | Result |
| F | Refer to EN 14582:2016 | | | 30 | N.D. |
| CI | | IC | m a/ka | 30 | N.D. |
| Br | | IC | mg/kg | 30 | N.D. |
| I | | | | 30 | N.D. |
| PFOA | Refer to | | | 10 | N.D. |
| PFOS | US EPA 3550C:2007 | LC/MS | mg/kg | 10 | N.D. |
| Red phosphorus | Extraction stripping method | ICP-OES | mg/kg | 20 | N.D. |

Note:

- 1. MDL = Method Detection Limit.
- 2. mg/kg = ppm.
- 3. N.D. = Not detected. (< MDL) If the clients required the result must be value(s), the value just for reference.
- 4. "---"Show that there is not specification value.



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2.2 PHOTO OF SAMPLE

| Sample NO. | Description of test part | Photo |
|------------|--------------------------|-------|
| - | 光學膜 | |



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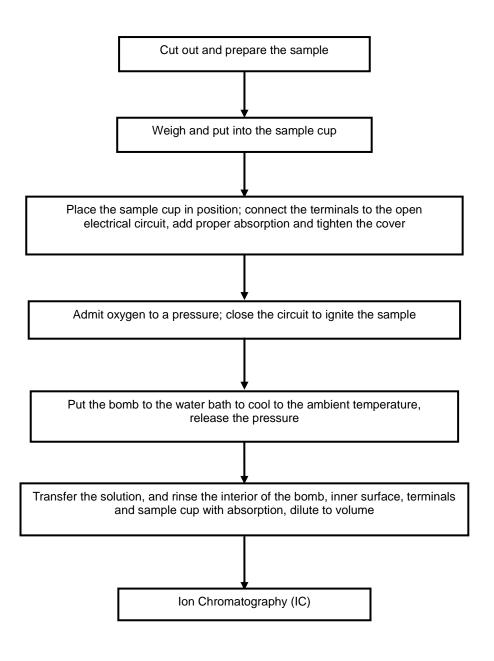
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2.3 MEASUREMENT FLOW CHART

Measurement Flowchart of Halogen





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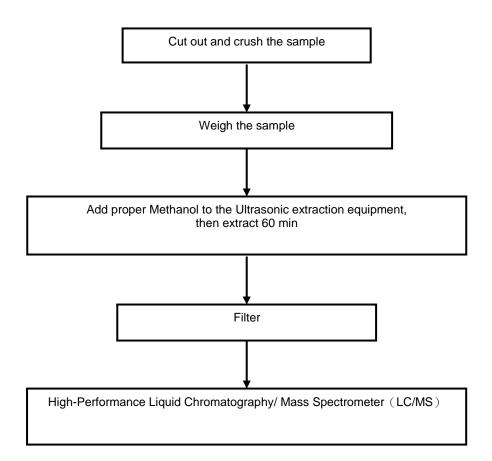
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Measurement Flowchart of PFOA/ PFOS





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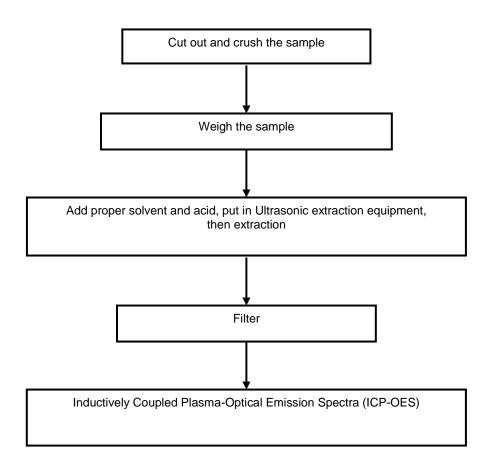
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Measurement Flowchart of Red phosphorus



-----End of Report-----