


TEST REPORT

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|  CTK Co., Ltd. <small>The Prime Leader of Global Regulatory Certification</small> | CTK Co., Ltd. 52-17, Sinjeong-ro 41beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 17093, Korea Tel: +82-31-284-3155 Fax: +82-31-624-9501 | REPORT No.: CTK-2024-RS02-0142 Page (1) / (5) pages | |
| | | | |

1. Applicant

- Name : Dongnam Petroleum Ind.Co.,Ltd
- Address : 31, Wonsi-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Republic of Korea
- Date of Receipt : 2024-02-27

2. Manufacturer

- Name : -
- Address : -

3. Use of Report : for quality control

4. Test sample / Model : DONA EP-100

5. Date(s) of test : 2024-02-28 to 2024-03-05

6. Test Standard (Method) used : Refer to 2 pages to 3 pages

7. Testing Environment : Temperature: (20 ± 1) °C, Humidity: (33 ± 1) % R.H.

8. Test Results : Refer to 2 pages to 3 pages

9. Location of Test : Permanent Testing Lab On Site Testing (Address : 52-17, Sinjeong-ro 41beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 17093, Korea)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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| Affirmation | Tested by | Technical Manager |
| | Chang Sik Yoon : (Signature) | Hyo Seuk Jang : (Signature) |


Remark. This report is not related to KOLAS accreditation and relevant regulation.

2024-03-05

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Test Results


| Heavy Metals | | | | | |
|------------------|--------------------------|--------------|--------------|-------------------------------|----------------------------|
| Test Item | Unit | Test Results | MDL | Test Methods | |
| Pb | mg/kg | N.D | 5.0 | IEC 62321-5:2013 _ICP-OES | |
| Cd | | N.D | 0.5 | IEC 62321-5:2013 _ICP-OES | |
| Hg | | N.D | 1.0 | IEC 62321-4:2013 _ICP-OES | |
| Cr ⁶⁺ | | N.D | 8.0 | IEC 62321-7-2:2017 _UV/Vis | |
| Flame Retardants | | | | | |
| Test Item | | Unit | Test Results | MDL | Test Method |
| PBBs | Bromobiphenyl | mg/kg | N.D | 5.0 | IEC 62321-6:2015 _GC/MS |
| | Dibromobiphenyl | | N.D | 5.0 | |
| | Tribromobiphenyl | | N.D | 5.0 | |
| | Tetrabromobiphenyl | | N.D | 5.0 | |
| | Pentabromobiphenyl | | N.D | 5.0 | |
| | Hexabromobiphenyl | | N.D | 5.0 | |
| | Heptabromobiphenyl | | N.D | 5.0 | |
| | Octabromobiphenyl | | N.D | 5.0 | |
| | Nonabromobiphenyl | | N.D | 5.0 | |
| | Decabromobiphenyl | | N.D | 5.0 | |
| PBDEs | Bromodiphenyl ether | mg/kg | N.D | 5.0 | IEC 62321-6:2015 _GC/MS |
| | Dibromodiphenyl ether | | N.D | 5.0 | |
| | Tribromodiphenyl ether | | N.D | 5.0 | |
| | Tetrabromodiphenyl ether | | N.D | 5.0 | |
| | Pentabromodiphenyl ether | | N.D | 5.0 | |
| | Hexabromodiphenyl ether | | N.D | 5.0 | |
| | Heptabromodiphenyl ether | | N.D | 5.0 | |
| | Octabromodiphenyl ether | | N.D | 5.0 | |
| | Nonabromodiphenyl ether | | N.D | 5.0 | |
| | Decabromodiphenyl ether | | N.D | 5.0 | |



* MDL : Method Detection limit, N.D : Not Detected



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| Phthalate Ester | | | | |
|------------------------------------|-------|--------------|------|------------------------------|
| Test Items | Unit | Test Results | MDL | Test Method |
| DBP (Dibutyl phthalate) | mg/kg | N.D | 50.0 | IEC 62321-8 : 2017 _GC/MS |
| BBP (Benzyl butyl phthalate) | | N.D | 50.0 | |
| DEHP(Bis (2-ethylhexyl) Phthalate) | | N.D | 50.0 | |
| DIBP (Di-isobutyl phthalate) | | N.D | 50.0 | |
| Halogen Contents | | | | |
| Test Items | Unit | Test Results | MDL | Test Method |
| Fluorine (F) | mg/kg | N.D | 30.0 | EN 14582 : 2016_IC |
| Chlorine (Cl) | | N.D | 30.0 | |
| Bromine (Br) | | N.D | 30.0 | |
| Iodine (I) | | N.D | 30.0 | |

* MDL : Method Detection limit, N.D : Not Detected

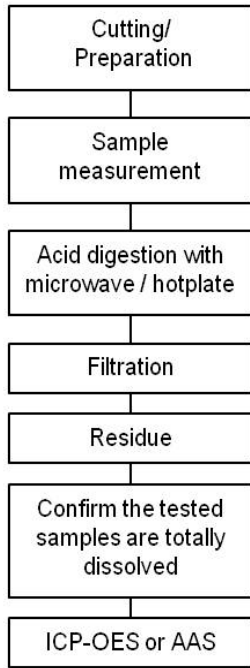


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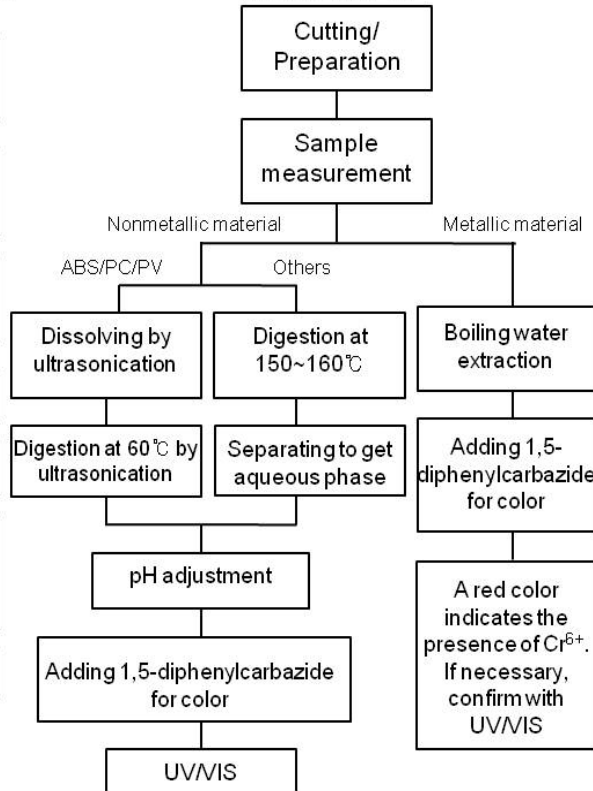
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FLOW CHART

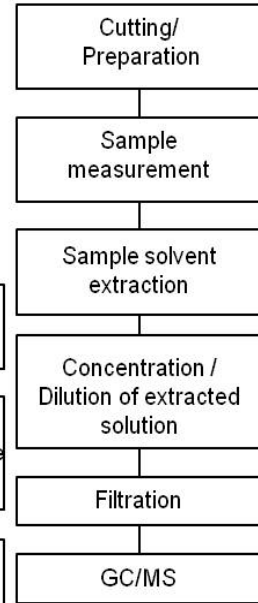
Digestion for material_ IEC 62321 for Pb, Cd, Hg




Extraction for polymer and Metallic material_ IEC 62321 for Cr⁶⁺



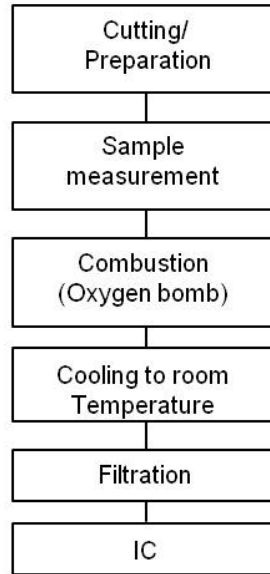
Extraction for polymer_ IEC 62321 for PBBs, PBDEs



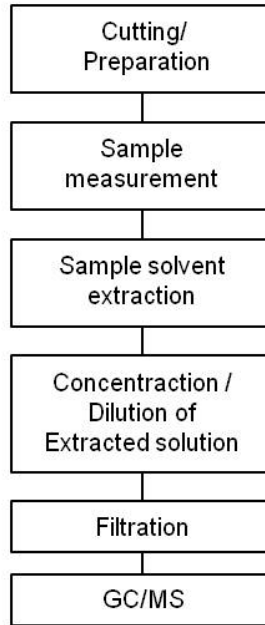
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Oxygen bomb for halogen_EN 14582



Extraction for polymer_ IEC 62321 for Phthalate



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