

# TEST REPORT


**KOTITI NO.** : 1514001264-01-01  
**APPLICANT** : Samsung Electro-mechanics Co., Ltd.  
**ADDRESS** : 314, Metan3-Dong, Yeongtong-Gu, Suwon, Gyeonggi-Do, Korea

**DATE IN** : June 30, 2015  
**DATE OUT** : July 06, 2015

|                           |  |
|---------------------------|--|
| <b>Sample Description</b> | <b>Power Inductor</b>  |
| <b>Style Number</b>       | <b>CIGW Series</b>   |
| <b>Buyer</b>              | <b>N/S</b>   |
| <b>Test Result</b>        | <b>For further details, please refer to the following page(s).</b> |
| <b>Test Method</b>        | <b>For further details, please refer to the following page(s).</b> |


\* N/S : Not Submitted

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REMARK: SEE ENCLOSED WORKSHEET(S) RESULT

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KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item   | CAS No.                 | Test Method  | Result |
|-----|---|-------------------------|--|--------|
| 1   | 4,4'-Diaminodiphenylmethane (MDA)   | 101-77-9                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %              | N.D.   |
| 2   | Anthracene  | 120-12-7                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit : 0.005 %             | N.D.   |
| 3   | Dibutyl phthalate (DBP)   | 117-81-7                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit : 0.005 %             | N.D.   |
| 4   | Bis (2-ethylhexyl) phthalate (DEHP)   | 85-68-7                 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit : 0.005 %             | N.D.   |
| 5   | Benzyl butyl phthalate (BBP)  | 84-74-2                 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit : 0.005 %             | N.D.   |
| 6   | Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified:<br>α – Hexabromocyclododecane<br>β – Hexabromocyclododecane<br>γ – Hexabromocyclododecane | 3194-55-6<br>25637-99-4 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %              | N.D.   |
| 7   | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)  | 81-15-2                 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %              | N.D.   |
| 8   | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)   | 85535-84-8              | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS and/or GC-ECD<br>Reporting limit: 0.02 % | N.D.   |
| 9   | Bis(tributyltin)oxide (TBTO)  | 56-35-9                 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %              | N.D.   |
| 10  | Cobalt dichloride   | 7646-79-9               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %                 | N.D.   |
| 11  | Diarsenic pentaoxide  | 1303-28-2               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %                 | N.D.   |
| 12  | Diarsenic trioxide  | 1327-53-3               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %                 | N.D.   |

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Sample Description : Power Inductor / CIGW Series

| No. | Test Item  | CAS No.    | Test Method   | Result |
|-----|--|------------|---|--------|
| 13  | Sodium dichromate  | 7789-12-0  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |
| 14  | Lead hydrogen arsenate                                     | 7784-40-9  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |
| 15  | Triethyl arsenate  | 15606-95-8 | With reference to KOTITI In-house method, by solvent extraction and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 16  | Anthracene oil   | 90640-80-5 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %      | N.D.   |
| 17  | Anthracene oil, anthracene paste, distn. Lights            | 91995-17-4 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %      | N.D.   |
| 18  | Anthracene oil, anthracene paste, anthracene fraction      | 91995-15-2 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %      | N.D.   |
| 19  | Anthracene oil, anthracene, anthracene-low                 | 90640-82-7 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %      | N.D.   |
| 20  | Anthracene oil, anthracene, anthracene paste               | 90640-81-6 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %      | N.D.   |
| 21  | Coal tar pitch, high temperature                           | 65996-93-2 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %      | N.D.   |
| 22  | 2,4-Dinitrotoluene   | 121-14-2   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %     | N.D.   |
| 23  | Diisobutyl phthalate                                       | 84-69-5    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit : 0.005 %    | N.D.   |
| 24  | Lead chromate  | 7758-97-6  | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 % | N.D.   |
| 25  | Lead chromate molybdate sulfate red (C.I. Pigment Red 104) | 12656-85-8 | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 % | N.D.   |

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| No. | Test Item   | CAS No.                  | Test Method   | Result |
|-----|---|--------------------------|---|--------|
| 26  | Lead sulfochromate yellow<br>(C.I. Pigment Yellow 34) | 1344-37-2                | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 % | N.D.   |
| 27  | Tris(2-chloroethyl)phosphate<br>(TCEP)                | 115-96-8                 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %     | N.D.   |
| 28  | Acrylamide  | 1979-06-01               | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %     | N.D.   |
| 29  | 1,1,2-Trichloroethylene                               | 1979-01-06               | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %     | N.D.   |
| 30  | Boric Acid  | 10043-35-3<br>11113-50-1 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |
| 31  | Disodium tetraborate<br>Anhydrous                     | 1330-43-4<br>12179-04-3  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |
| 32  | Tetraboron disodium<br>heptaoxide, hydrate            | 12267-73-1               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |
| 33  | Sodium chromate                                       | 7775-11-3                | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 % | N.D.   |
| 34  | Potassium chromate                                    | 7789-00-6                | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 % | N.D.   |
| 35  | Ammonium dichromate                                   | 7789-09-5                | With reference to KOTITI In-house method, determined by UV-VIS spectrophotometer<br>Reporting limit: 0.01 %             | N.D.   |
| 36  | Potassium dichromate                                  | 7778-50-9                | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 % | N.D.   |
| 37  | Cobalt(II) sulphate                                   | 10124-43-3               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |
| 38  | Cobalt(II) dinitrate                                  | 10141-05-6               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %        | N.D.   |

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|-----|--|-------------------------|---|--------|
| 39  | Cobalt(II) carbonate   | 513-79-1                | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 40  | Cobalt(II) diacetate   | 71-48-7                 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 41  | 2-methoxyethanol   | 109-86-4                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 42  | 2-ethoxyethanol  | 110-80-5                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 43  | Chromium trioxide  | 1333-82-0               | With reference to KOTITI In-house method, determined by UV-VIS Spectrophotometer<br>Reporting limit: 0.01 %         | N.D.   |
| 44  | Acids generated from chromium trioxide and their oligomers<br>-Group containing<br>-Chromic acid<br>-Dichromic acid<br>-Oligomers of chromic acid and dichromic acid | 7738-94-5<br>13530-68-2 | With reference to KOTITI In-house method, determined by UV-VIS Spectrophotometer<br>Reporting limit: 0.005 %        | N.D.   |
| 45  | 2-Ethoxyethyl acetate  | 111-15-9                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 46  | Strontium chromate   | 7789-06-2               | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 47  | 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)  | 68515-42-4              | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %  | N.D.   |
| 48  | Hydrazine  | 7803-57-8<br>302-01-2   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 49  | 1-methyl-2-pyrrolidone   | 872-50-4                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 50  | 1,2,3-trichloropropane   | 96-18-4                 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |

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|-----|---|------------|---|--------|
| 51  | 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) | 71888-89-6 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 52  | 4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)                    | 140-66-9   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 53  | 2-Methoxyaniline; o-Anisidine   | 90-04-0    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.05 %  | N.D.   |
| 54  | Arsenic acid  | 7778-39-4  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 55  | Calcium arsenate  | 7778-44-1  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 56  | Trilead diarsenate  | 3687-31-8  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 57  | 1,2-Dichloroethane; ethylene dichloride                                     | 107-06-2   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 58  | Bis(2-methoxyethyl) ether   | 111-96-6   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 59  | Bis(2-methoxyethyl) phthalate   | 117-82-8   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.05 %  | N.D.   |
| 60  | N,N-dimethylacetamide (DMAC)  | 127-19-5   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 61  | Lead diazide; Lead azide  | 13424-46-9 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 62  | Lead styphnate  | 15245-44-0 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %    | N.D.   |
| 63  | 2,2'-dichloro-4,4'-ethylenedianiline (MOCA)                                 | 101-14-4   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |

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|-----|---|------------|--|--------|
| 64  | Dichromium tris(chromate)   | 24613-89-6 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %   | N.D.   |
| 65  | Potassium hydroxyoctaoxodizincatedichromate   | 11103-86-9 | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 %                                      | N.D.   |
| 66  | Pentazinc chromate octahydroxide  | 49663-84-5 | With reference to KOTITI In-house method, determined by ICP-OES and UV-VIS Spectrophotometer<br>Reporting limit: 0.01 %                                      | N.D.   |
| 67  | Phenolphthalein   | 77-09-8    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %  | N.D.   |
| 68  | Lead dipicrate  | 6477-64-1  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %   | N.D.   |
| 69  | Formaldehyde, oligomeric reaction products with aniline (technical MDA)   | 25214-70-4 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %  | N.D.   |
| 70  | Aluminosilicate Refractory Ceramic Fibres (RCF)   | -          | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES and further PLM confirmation when necessary<br>Reporting limit: 0.01 % | N.D.   |
| 71  | Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)   | -          | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES and further PLM confirmation when necessary<br>Reporting limit: 0.01 % | N.D.   |
| 72  | [4-[4,4'- bis(dimethylamino) Benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] | 548-62-9   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %  | N.D.   |
| 73  | α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]                                  | 6786-83-0  | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %  | N.D.   |
| 74  | N,N,N',N'-tetramethyl- 4,4'-methylenedianiline (Michler's base)   | 101-61-1   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %  | N.D.   |

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| 75  | 1,3,5-tris[(2S and 2R)- 2,3-epoxypropyl]- 1,3,5- triazine-2,4,6- (1H,3H,5H)- trione ( $\beta$ -TGIC)   | 59653-74-6 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 76  | Diboron trioxide   | 1303-86-2  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %                       | N.D.   |
| 77  | 1,2- bis(2- methoxyethoxy)ethane (TEGDME; triglyme)  | 112-49-2   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.01 %                     | N.D.   |
| 78  | 4,4'- bis(dimethylamino)- 4''-(methylamino)trityl alcohol [with $\geq$ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]   | 561-41-1   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 79  | Lead(II) bis(methanesulfonate)   | 17570-76-2 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %                       | N.D.   |
| 80  | Formamide  | 75-12-7    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 81  | [4-[[4- aniline- 1- naphthyl] [4-(dimethylamino)phenyl] methylene] cyclohexa- 2,5- dien- 1- ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with $\geq$ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] | 2580-56-5  | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS and/or HPLC-DAD-MS<br>Reporting limit: 0.005 % | N.D.   |
| 82  | 1,2- dimethoxyethane; ethylene glycol dimethyl ether (EGDME)   | 110-71-4   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 83  | 1,3,5- Tris(oxiran- 2- ylmethyl)- 1,3,5- triazinane- 2,4,6- trione (TGIC)  | 2451-62-9  | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 84  | 3,3'- bis(dimethylamino)benzophenone (Michler's ketone)  | 90-94-8    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 85  | Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)   | 1163-19-5  | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |
| 86  | N,N-dimethylformamide  | 68-12-2    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %                    | N.D.   |

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| 87  | Methoxy acetic acid   | 625-45-6  | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 88  | Dibutyltin dichloride (DBT)   | 683-18-1  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%              | N.D.   |
| 89  | 1,2-Diethoxyethane  | 629-14-1  | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 90  | Cyclohexane-1,2-dicarboxylic anhydride [1]<br>cis-cyclohexane-1,2-dicarboxylic anhydride [2]<br>trans-cyclohexane-1,2-dicarboxylic anhydride [3]<br>[The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry].   | 85-42-7,<br>13149-00-3,<br>14166-21-3                   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.1 %   | N.D.   |
| 91  | Hexahydromethylphthalic anhydride [1],<br>Hexahydro-4-methylphthalic anhydride [2],<br>Hexahydro-1-methylphthalic anhydride [3],<br>Hexahydro-3-methylphthalic anhydride [4]<br>[The individual isomers [2], [3] and [4] (including their cis- and trans-stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry] | 25550-51-0,<br>19438-60-9,<br>48122-14-1,<br>57110-29-9 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.1 %   | N.D.   |
| 92  | 4-Nonylphenol, branched and linear<br>[substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]   | -   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 93  | Heptacosafuorotetradecanoic acid  | 376-06-7  | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |

**Remark**

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- N.A. = not applicable

KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item   | CAS No.     | Test Method  | Result |
|-----|---|-------------|--|--------|
| 94  | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear  | 84777-06-0  | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 95  | Henicosafuoroundecanoic acid  | 2058-94-8   | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 96  | N-pentyl-isopentylphthalate   | 776297-69-9 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 97  | Pentacosafuorotridecanoic acid  | 72629-94-8  | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 98  | 4-(1,1,3,3-tetramethylbutyl) Phenol, ethoxylated<br>[covering well-defined substances and UVCB substances, polymers and homologues] | -           | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 99  | Tricosafuorododecanoic acid   | 307-55-1    | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 100 | Lead bis(tetrafluoroborate)   | 13814-96-6  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 101 | Orange lead (Lead tetroxide)  | 1314-41-6   | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 102 | Diethyl sulphate  | 64-67-5     | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 103 | Dinoseb (6-sec-butyl-2,4-dinitrophenol)   | 88-85-7     | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.1 %            | N.D.   |
| 104 | Lead titanium zirconium oxide   | 12626-81-2  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 105 | Acetic acid, lead salt, basic   | 51404-69-4  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 106 | Furan   | 110-00-9    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.1 %            | N.D.   |

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- N.A. = not applicable

KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item   | CAS No.     | Test Method  | Result |
|-----|---|-------------|--|--------|
| 107 | N-methylacetamide                                 | 79-16-3     | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 108 | o-toluidine                                       | 95-53-4     | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 109 | 3-ethyl-2-methyl-2-(3methylbutyl)-1,3-oxazolidine | 143860-04-2 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.1 %            | N.D.   |
| 110 | 4,4'-oxydianiline and its salts                   | 101-80-4    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 111 | [Phthalato(2-)]dioxotrilead                       | 69011-06-9  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 112 | Lead titanium trioxide                            | 12060-00-3  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 113 | Lead oxide sulfate                                | 12036-76-9  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 114 | Lead dinitrate                                    | 10099-74-8  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 115 | 4-aminoazobenzene                                 | 60-09-03    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 116 | Lead cyanamide                                    | 20837-86-9  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 117 | Tetralead trioxide sulphate                       | 12202-17-4  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 118 | 4-methyl-m-phenylenediamine (toluene-2,4-diamine) | 95-80-7     | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 119 | Pyrochlore, antimony lead yellow                  | 8012-00-8   | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |

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KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item   | CAS No.    | Test Method  | Result |
|-----|---|------------|--|--------|
| 120 | Trilead bis(carbonate)dihydroxide   | 1319-46-6  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 121 | Dimethyl sulphate   | 77-78-1    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.1 %            | N.D.   |
| 122 | Dioxobis(stearato)trilead   | 12578-12-0 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 123 | Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] | 68784-75-8 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 124 | Biphenl-4-ylamine   | 92-67-1    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 125 | Lead monoxide (Lead oxide)  | 1317-36-8  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 126 | Pentalead tetraoxide sulphate   | 12065-90-6 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.05 %             | N.D.   |
| 127 | Methyloxirane (Propylene oxide)   | 75-56-9    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.1 %            | N.D.   |
| 128 | Silicic acid, lead salt   | 11120-22-2 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 129 | Trilead dioxide phosphonate   | 12141-20-7 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 130 | o-aminoazotoluene [(4-o-tolylazo-o-toluidine)]  | 97-56-3    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |

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KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item   | CAS No.    | Test Method  | Result |
|-----|---|------------|--|--------|
| 131 | 1-bromopropane (n-propyl bromide)                 | 106-94-5   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.1 %            | N.D.   |
| 132 | 6-methoxy-m-toluidine (p-cresidine)               | 120-71-8   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 133 | 4,4'-methylenedi-o-toluidine                      | 838-88-0   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 134 | Tetraethyllead                                    | 78-00-2    | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%              | N.D.   |
| 135 | Sulfurous acid, lead salt, dibasic                | 62229-08-7 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01 %             | N.D.   |
| 136 | Fatty acids, C16-18, lead salts                   | 91031-62-8 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%              | N.D.   |
| 137 | Diisopentylphthalate (DIPP)                       | 605-50-5   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS or LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 138 | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) | 123-77-3   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.1 %            | N.D.   |
| 139 | Cadmium   | 7440-43-9  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%              | N.D.   |
| 140 | Cadmium oxide                                     | 1306-19-0  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%              | N.D.   |
| 141 | Ammoniumpentadecafluorooctanoate (APFO)           | 3825-26-1  | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 142 | Pentadecafluorooctanoic acid (PFOA)               | 335-67-1   | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 %          | N.D.   |
| 143 | Dipentyl phthalate (DPP)                          | 131-18-0   | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 %          | N.D.   |

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KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item   | CAS No.    | Test Method   | Result |
|-----|---|------------|---|--------|
| 144 | 4-Nonylphenol, branched and linear, ethoxylated [Substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof] | -          | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 145 | Cadmium sulphide  | 1306-23-6  | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |
| 146 | Dihexyl phthalate   | 84-75-3    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 147 | C.I. Direct Red 28; Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate)   | 573-58-0   | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 148 | C.I. Direct Black 38; Disodium 4-amino-3-[[4'-(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate  | 1937-37-7  | With reference to KOTITI In-house method, by solvent extraction and determined by LC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 149 | Imidazolidine-2thione; 2-imidazoline-2-thiol  | 96-45-7    | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 150 | Lead di(acetate)  | 301-04-2   | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |
| 151 | Trixylyl phosphate  | 25155-23-1 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 152 | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear  | 68515-50-4 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 153 | Cadmium chloride  | 10108-64-2 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |

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KOTITI No. : 1514001264-01-01

Sample Description : Power Inductor / CIGW Series

| No. | Test Item  | CAS No.                   | Test Method   | Result |
|-----|--|---------------------------|---|--------|
| 154 | Sodium perborate; perboric acid, sodium salt   | 15120-21-5                | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |
| 155 | Sodium peroxometaborate  | 7632-04-4                 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |
| 156 | Cadmium sulphate   | 10124-36-4;<br>31119-53-6 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |
| 157 | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)   | 3846-71-7                 | With reference to KOTITI In-house method, by solvent extraction and determined by LC/MS<br>Reporting limit: 0.005 % | N.D.   |
| 158 | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate(DOTE)  | 15571-58-1                | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 159 | Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) | -                         | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 160 | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)   | 25973-55-1                | With reference to KOTITI In-house method, by solvent extraction and determined by LC/MS<br>Reporting limit: 0.005 % | N.D.   |
| 161 | Cadmium fluoride   | 7790-79-6                 | With reference to KOTITI In-house method, by acid digestion and determined by ICP-OES<br>Reporting limit: 0.01%     | N.D.   |
| 162 | 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]                    | -                         | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |
| 163 | 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters;<br>1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate  | 68515-51-5,<br>68648-93-1 | With reference to KOTITI In-house method, by solvent extraction and determined by GC-MS<br>Reporting limit: 0.005 % | N.D.   |

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- N.A. = not applicable

**SAMPLE PICTURE**

