

January 7, 2015

REACH Certificate of Compliance

TDK Corporation and its subsidiaries (hereinafter called collectively 'TDK') certifies compliance with all legal requirements from REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH regulation) concerning the following products:

TDK Product Name: Wire-wound type Inductor

VLS-E Series (VLS201610E / VLS201612E / VLS2010E / VLS2012E / VLS252008E /
VLS252010E / VLS252012E / VLS252015E / VLS3010E / VLS3012E /
VLS3015E / VLS4012E)

Note: Information on substances indicated as candidate substances for authorization by ECHA (European Chemical Agency) is provided in good faith and to the best of our knowledge. Such information is available for intentional use or inclusion of the referred substances based on supplier surveys in accordance with the "TDK Green Procurement Standard Document" or direct report from our suppliers.

Content of SVHC (Object Substances : Appendix "Candidate List")

☒ Not intentionally contained

☐ Contained

Substance name: _____ CAS No.: _____

Sincerely yours

Authorized signatory for TDK-EPC Corporation



Signature of Dept./Environmental Manager

Name: Atsushi Hosoya

Position: Senior Manager

Department: Quality Assurance Department, Magnetics Business Group

Candidate List (Number of substances : 161)

| Substance name | EC No. | CAS No. | Date of inclusion |
|---|-------------------------|---------------------------|---------------------------|
| Bis (2-ethyl(hexyl)phthalate) (DEHP) | 204-211-0 | 117-81-7 | 2014/12/17; 2008/10/28 |
| 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) | 223-346-6 | 3846-71-7 | 2014/12/17 |
| 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetra decanoate (DOTE) | 239-622-4 | 15571-58-1 | 2014/12/17 |
| Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetra decanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-oct yl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) | - | - | 2014/12/17 |
| 2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentylphenol (UV-328) | 247-384-8 | 25973-55-1 | 2014/12/17 |
| Cadmium fluoride | 232-222-0 | 7790-79-6 | 2014/12/17 |
| Cadmium sulphate | 233-331-6 | 10124-36-4, 31119-53-6 | 2014/12/17 |
| 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear | 271-093-5 | 68515-50-4 | 2014/6/16 |
| Sodium perborate; perboric acid, sodium salt | 239-172-9; 234-390-0 | - | 2014/6/16 |
| Sodium peroxometaborate | 231-556-4 | 7632-04-4 | 2014/6/16 |
| Cadmium chloride | 233-296-7 | 10108-64-2 | 2014/6/16 |
| Cadmium sulphide | 215-147-8 | 1306-23-6 | 2013/12/16 |
| Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4 -yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38) | 217-710-3 | 1937-37-7 | 2013/12/16 |
| Dihexyl phthalate | 201-559-5 | 84-75-3 | 2013/12/16 |
| Imidazolidine-2-thione; (2-imidazoline-2-thiol) | 202-506-9 | 96-45-7 | 2013/12/16 |
| Trixylyl phosphate | 246-677-8 | 25155-23-1 | 2013/12/16 |
| Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphtha lene-1-sulphonate) (C.I. Direct Red 28) | 209-358-4 | 573-58-0 | 2013/12/16 |
| Lead di(acetate) | 206-104-4 | 301-04-2 | 2013/12/16 |
| Cadmium | 231-152-8 | 7440-43-9 | 2013/6/20 |
| Ammonium pentadecafluorooctanoate (APFO) | 223-320-4 | 3825-26-1 | 2013/6/20 |
| Pentadecafluorooctanoic acid (PFOA) | 206-397-9 | 335-67-1 | 2013/6/20 |
| Dipentyl phthalate (DPP) | 205-017-9 | 131-18-0 | 2013/6/20 |
| 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] | - | - | 2013/6/20 |
| Cadmium oxide | 215-146-2 | 1306-19-0 | 2013/6/20 |

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| Pyrochlore, antimony lead yellow | 232-382-1 | 8012-00-8 | 2012/12/19 |
| 6-methoxy-m-toluidine (p-cresidine) | 204-419-1 | 120-71-8 | 2012/12/19 |
| Henicosfluoroundecanoic acid | 218-165-4 | 2058-94-8 | 2012/12/19 |
| Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] <i>[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]</i> | 247-094-1, 243-072-0, 256-356-4, 260-566-1 | 25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9 | 2012/12/19 |
| Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] <i>[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]</i> | 201-604-9, 236-086-3, 238-009-9 | 85-42-7, 13149-00-3, 14166-21-3 | 2012/12/19 |
| Dibutyltin dichloride (DBTC) | 211-670-0 | 683-18-1 | 2012/12/19 |
| Lead bis(tetrafluoroborate) | 237-486-0 | 13814-96-5 | 2012/12/19 |
| Lead dinitrate | 233-245-9 | 10099-74-8 | 2012/12/19 |
| Silicic acid, lead salt | 234-363-3 | 11120-22-2 | 2012/12/19 |
| 4-Aminoazobenzene | 200-453-6 | 60-09-3 | 2012/12/19 |
| Lead titanium zirconium oxide | 235-727-4 | 12626-81-2 | 2012/12/19 |
| Lead monoxide (lead oxide) | 215-267-0 | 1317-36-8 | 2012/12/19 |
| o-Toluidine | 202-429-0 | 95-53-4 | 2012/12/19 |
| 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 421-150-7 | 143860-04-2 | 2012/12/19 |
| Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped <i>[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]</i> | 272-271-5 | 68784-75-8 | 2012/12/19 |
| Trilead bis(carbonate)dihydroxide | 215-290-6 | 1319-46-6 | 2012/12/19 |
| Furan | 203-727-3 | 110-00-9 | 2012/12/19 |
| N,N-dimethylformamide | 200-679-5 | 68-12-2 | 2012/12/19 |
| 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated <i>[covering well-defined substances and UVCB substances, polymers and homologues]</i> | - | - | 2012/12/19 |
| 4-Nonylphenol, branched and linear <i>[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]</i> | - | - | 2012/12/19 |
| 4,4'-methylenedi-o-toluidine | 212-658-8 | 838-88-0 | 2012/12/19 |
| Diethyl sulphate | 200-589-6 | 64-67-5 | 2012/12/19 |
| Dimethyl sulphate | 201-058-1 | 77-78-1 | 2012/12/19 |
| Lead oxide sulfate | 234-853-7 | 12036-76-9 | 2012/12/19 |
| Lead titanium trioxide | 235-038-9 | 12060-00-3 | 2012/12/19 |
| Acetic acid, lead salt, basic | 257-175-3 | 51404-69-4 | 2012/12/19 |
| [Phthalato(2-)]dioxotrilead | 273-688-5 | 69011-06-9 | 2012/12/19 |
| Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE) | 214-604-9 | 1163-19-5 | 2012/12/19 |

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| N-methylacetamide | 201-182-6 | 79-16-3 | 2012/12/19 |
| Dinoseb (6-sec-butyl-2,4-dinitrophenol) | 201-861-7 | 88-85-7 | 2012/12/19 |
| 1,2-Diethoxyethane | 211-076-1 | 629-14-1 | 2012/12/19 |
| Tetralead trioxide sulphate | 235-380-9 | 12202-17-4 | 2012/12/19 |
| N-pentyl-isopentylphthalate | - | 776297-69-9 | 2012/12/19 |
| Dioxobis(stearato)trilead | 235-702-8 | 12578-12-0 | 2012/12/19 |
| Tetraethyllead | 201-075-4 | 78-00-2 | 2012/12/19 |
| Pentalead tetraoxide sulphate | 235-067-7 | 12065-90-6 | 2012/12/19 |
| Pentacosafuorotridecanoic acid | 276-745-2 | 72629-94-8 | 2012/12/19 |
| Tricosafuorododecanoic acid | 206-203-2 | 307-55-1 | 2012/12/19 |
| Heptacosafuorotetradecanoic acid | 206-803-4 | 376-06-7 | 2012/12/19 |
| 1-bromopropane (n-propyl bromide) | 203-445-0 | 106-94-5 | 2012/12/19 |
| Methoxyacetic acid | 210-894-6 | 625-45-6 | 2012/12/19 |
| 4-methyl-m-phenylenediamine (toluene-2,4-diamine) | 202-453-1 | 95-80-7 | 2012/12/19 |
| Methyloxirane (Propylene oxide) | 200-879-2 | 75-56-9 | 2012/12/19 |
| Trilead dioxide phosphonate | 235-252-2 | 12141-20-7 | 2012/12/19 |
| o-aminoazotoluene | 202-591-2 | 97-56-3 | 2012/12/19 |
| 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear | 284-032-2 | 84777-06-0 | 2012/12/19 |
| 4,4'-oxydianiline and its salts | 202-977-0 | 101-80-4 | 2012/12/19 |
| Orange lead (lead tetroxide) | 215-235-6 | 1314-41-6 | 2012/12/19 |
| Biphenyl-4-ylamine | 202-177-1 | 92-67-1 | 2012/12/19 |
| Diisopentylphthalate | 210-088-4 | 605-50-5 | 2012/12/19 |
| Fatty acids, C16-18, lead salts | 292-966-7 | 91031-62-8 | 2012/12/19 |
| Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) | 204-650-8 | 123-77-3 | 2012/12/19 |
| Sulfurous acid, lead salt, dibasic | 263-467-1 | 62229-08-7 | 2012/12/19 |
| Lead cyanamidate | 244-073-9 | 20837-86-9 | 2012/12/19 |
| α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] | 229-851-8 | 6786-83-0 | 2012/6/18 |
| N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) | 202-959-2 | 101-61-1 | 2012/6/18 |
| 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-tri- one (β -TGIC) | 423-400-0 | 59653-74-6 | 2012/6/18 |
| Diboron trioxide | 215-125-8 | 1303-86-2 | 2012/6/18 |
| 1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme) | 203-977-3 | 112-49-2 | 2012/6/18 |
| 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)] | 209-218-2 | 561-41-1 | 2012/6/18 |
| Lead(II) bis(methanesulfonate) | 401-750-5 | 17570-76-2 | 2012/6/18 |
| Formamide | 200-842-0 | 75-12-7 | 2012/6/18 |
| [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethyla mmonium chloride (C.I. Basic Violet 3) [with $\geq 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] | 208-953-6 | 548-62-9 | 2012/6/18 |
| 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) | 203-794-9 | 110-71-4 | 2012/6/18 |

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| [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylenecyclohexa-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)] | 219-943-6 | 2580-56-5 | 2012/6/18 |
| 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) | 219-514-3 | 2451-62-9 | 2012/6/18 |
| 4,4'-bis(dimethylamino) benzophenone (Michler's ketone) | 202-027-5 | 90-94-8 | 2012/6/18 |
| 4-(1,1,3,3-tetramethylbutyl)phenol; 4-tert-octyl phenol | 205-426-2 | 140-66-9 | 2011/12/19 |
| N,N-dimethylacetamide | 204-826-4 | 127-19-5 | 2011/12/19 |
| Phenolphthalein | 201-004-7 | 77-09-8 | 2011/12/19 |
| Lead diazide; Lead azide | 236-542-1 | 13424-46-9 | 2011/12/19 |
| Lead dipicrate | 229-335-2 | 6477-64-1 | 2011/12/19 |
| 1,2-Dichloroethane | 203-458-1 | 107-06-2 | 2011/12/19 |
| Calcium arsenate | 231-904-5 | 7778-44-1 | 2011/12/19 |
| Dichromium tris(chromate) | 246-356-2 | 24613-89-6 | 2011/12/19 |
| 2-Methoxyaniline; o-Anisidine | 201-963-1 | 90-04-0 | 2011/12/19 |
| Pentazinc chromate octahydroxide | 256-418-0 | 49663-84-5 | 2011/12/19 |
| Arsenic acid | 231-901-9 | 7778-39-4 | 2011/12/19 |
| Potassium hydroxyoctaoxodizincatedichromate | 234-329-8 | 11103-86-9 | 2011/12/19 |
| Formaldehyde, oligomeric reaction products with aniline (technical MDA) | 500-036-1 | 25214-70-4 | 2011/12/19 |
| Lead styphnate | 239-290-0 | 15245-44-0 | 2011/12/19 |
| Trilead diarsenate; Lead(II) arsenate | 222-979-5 | 3687-31-8 | 2011/12/19 |
| Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm). c) alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less or equal to 18% by weight | - | - | 2011/12/19 |
| Bis(2-methoxyethyl) phthalate | 204-212-6 | 117-82-8 | 2011/12/19 |
| Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μm) c) alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content less or equal to 18% by weight | - | - | 2011/12/19 |
| Bis(2-methoxyethyl) ether | 203-924-4 | 111-96-6 | 2011/12/19 |

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| 2,2'-dichloro-4,4'-methylenedianiline | 202-918-9 | 101-14-4 | 2011/12/19 |
| Cobalt dichloride | 231-589-4 | 7646-79-9 | 2011/06/20 - 2008/10/28 |
| 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) | 276-158-1 | 71888-89-6 | 2011/6/20 |
| 1,2-benzenedicarboxylic acid; di-C7-11-branched and linear alkyl esters (DHNUP) | 271-084-6 | 68515-42-4 | 2011/6/20 |
| Strontium chromate | 232-142-6 | 7789-06-2 | 2011/6/20 |
| 1-methyl-2-pyrrolidone | 212-828-1 | 872-50-4 | 2011/6/20 |
| 1,2,3-trichloropropane | 202-486-1 | 96-18-4 | 2011/6/20 |
| 2-ethoxyethyl acetate | 203-839-2 | 111-15-9 | 2011/6/20 |
| Hydrazine | 206-114-9 | 302-01-2, 7803-57-8 | 2011/6/20 |
| Cobalt(II) diacetate | 200-755-8 | 71-48-7 | 2010/12/15 |
| Cobalt(II) sulphate | 233-334-2 | 10124-43-3 | 2010/12/15 |
| 2-Ethoxyethanol | 203-804-1 | 110-80-5 | 2010/12/15 |
| Acids generated from chromium trioxide and their oligomers Group containing: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid | 231-801-5, 236-881-5 | 7738-94-5, 13530-68-2 | 2010/12/15 |
| 2-Methoxyethanol | 203-713-7 | 109-86-4 | 2010/12/15 |
| Chromium trioxide | 215-607-8 | 1333-82-0 | 2010/12/15 |
| Cobalt(II) carbonate | 208-169-4 | 513-79-1 | 2010/12/15 |
| Cobalt(II) dinitrate | 233-402-1 | 10141-05-6 | 2010/12/15 |
| Trichloroethylene | 201-167-4 | 79-01-6 | 2010/6/18 |
| Potassium dichromate | 231-906-6 | 7778-50-9 | 2010/6/18 |
| Tetraboron disodium heptaoxide, hydrate | 235-541-3 | 12267-73-1 | 2010/6/18 |
| Ammonium dichromate | 232-143-1 | 7789-09-5 | 2010/6/18 |
| Boric acid | 233-139-2, 234-343-4 | 10043-35-3, 11113-50-1 | 2010/6/18 |
| Sodium chromate | 231-889-5 | 7775-11-3 | 2010/6/18 |
| Disodium tetraborate, anhydrous | 215-540-4 | 1303-96-4, 1330-43-4, 12179-04-3 | 2010/6/18 |
| Potassium chromate | 232-140-5 | 7789-00-6 | 2010/6/18 |
| Acrylamide | 201-173-7 | 79-06-1 | 2010/3/30 |
| Lead sulfochromate yellow (C.I. Pigment Yellow 34) | 215-693-7 | 1344-37-2 | 2010/1/13 |
| Lead chromate molybdate sulphate red (C.I. Pigment Red 104) | 235-759-9 | 12656-85-8 | 2010/1/13 |
| Anthracene oil | 292-602-7 | 90640-80-5 | 2010/1/13 |
| 2,4-Dinitrotoluene | 204-450-0 | 121-14-2 | 2010/1/13 |
| Anthracene oil, anthracene paste, anthracene fraction | 295-275-9 | 91995-15-2 | 2010/1/13 |
| Anthracene oil, anthracene-low | 292-604-8 | 90640-82-7 | 2010/1/13 |
| tris(2-chloroethyl)phosphate | 204-118-5 | 115-96-8 | 2010/1/13 |
| Diisobutyl phthalate (DIBP) | 201-553-2 | 84-69-5 | 2010/1/13 |
| Lead chromate | 231-846-0 | 7758-97-6 | 2010/1/13 |
| Anthracene oil, anthracene paste | 292-603-2 | 90640-81-6 | 2010/1/13 |
| Pitch, coal tar, high temp. | 266-028-2 | 65996-93-2 | 2010/1/13 |
| Anthracene oil, anthracene paste, distn. Lights | 295-278-5 | 91995-17-4 | 2010/1/13 |
| Lead hydrogen arsenate | 232-064-2 | 7784-40-9 | 2008/10/28 |
| Benzyl butyl phthalate (BBP) | 201-622-7 | 85-68-7 | 2008/10/28 |

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| 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) | 201-329-4 | 81-15-2 | 2008/10/28 |
| Diarsenic trioxide | 215-481-4 | 1327-53-3 | 2008/10/28 |
| Bis(tributyltin)oxide (TBTO) | 200-268-0 | 56-35-9 | 2008/10/28 |
| Triethyl arsenate | 427-700-2 | 15606-95-8 | 2008/10/28 |
| Diarsenic pentaoxide | 215-116-9 | 1303-28-2 | 2008/10/28 |
| Sodium dichromate ,dihydrate | 234-190-3 | 10588-01-9, 7789-12-0 | 2008/10/28 |
| Dibutyl phthalate (DBP) | 201-557-4 | 84-74-2 | 2008/10/28 |
| 4,4'- Diaminodiphenylmethane (MDA) | 202-974-4 | 101-77-9 | 2008/10/28 |
| Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) | 287-476-5 | 85535-84-8 | 2008/10/28 |
| Anthracene | 204-371-1 | 120-12-7 | 2008/10/28 |
| Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α – HBCDD, β -HBCDD, γ -HBCDD) | 247-148-4 and 221-695-9 | 25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8) | 2008/10/28 |