



REACH Declaration

Candidate List of Substances of Very High Concern (SVHC)

Product Name : Carbon Black Masterbatch
Grade : CB9095
Issued Date : July 17, 2021

We declare that above grade manufactured by Muil chemical does not contain any of the substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) regarding Regulation (EC) No 1907/2006 concerning the REACH.

The 211 substances restricted per Regulation was last updated on January 19, 2021 published by the European Chemicals Agency at:
<https://echa.europa.eu/candidate-list-table>

The substances on the REACH SVHC candidate list in concentrations greater than 0.1% by weight per article are listed below.

Based on the reports from our 3rd party provider, we hereby certify that below mentioned substances are never used in the manufacturing process as intended

※ This document is intended to inform users of the product for purpose of health safety and environmental requirements only.

Development /Quality Control Team
Muil chemical, ltd

Muil Chemical Co., Ltd.

Headquater
237, Yeosusandan-ro, Yeosu-si, Jeollanam-do, Korea
Tel +82-61-690-9411 , Fax +82-61-685-4332

Korea, Gumi Factory
196-37, 3rd Gongdan-3rdro, Gumi-si, Gyeongsangbuk-do, Korea
Tel +82-54-716-1813 , Fax + 82-54-716-1815

China, Lianyungang Factory
Sankou Industrial Park, Sankou-zhen, Guannan-xian, Lianyungang-shi, Jiangsu Province, China
Tel +86-518-8322-3616 , Fax+86518-8322-3616

Candidate List of Substances of Very High Concern

| No. | Substance Name | CAS number | EC number | Reporting Limit (%) | Concentration(%) | *Remark |
|-----|---|--|------------------------|---------------------|------------------|---------|
| 1 | Alkanes, C10-13, chloro (Short ChainChlorinated Paraffins) | 85535-84-8 | 287-476-5 | 0.05 | N.D. | DOC A |
| 2 | Anthracene | 120-12-7 | 204-371-1 | 0.05 | N.D. | |
| 3 | Benzyl butyl phthalate (BBP) | 85-68-7 | 201-622-7 | 0.05 | N.D. | |
| 4 | Bis(2-ethylhexyl)phthalate (DEHP) | 117-81-7 | 204-211-0 | 0.05 | N.D. | |
| 5 | Bis(tributyltin)oxide | 56-35-9 | 200-268-0 | 0.05 | N.D. | |
| 6 | Cobalt dichloride* | 7646-79-9 | 231-589-4 | 0.005 | N.D. | |
| 7 | 4,4-Diaminodiphenylmethane | 101-77-9 | 202-974-4 | 0.05 | N.D. | |
| 8 | Diarsenic pentaoxide* | 1303-28-2 | 215-116-9 | 0.005 | N.D. | |
| 9 | Diarsenic trioxide* | 1327-53-3 | 215-481-4 | 0.005 | N.D. | |
| 10 | Dibutyl phthalate (DBP) | 84-74-2 | 201-557-4 | 0.05 | N.D. | |
| 11 | Hexabromocyclododecane (HBCDD)and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) | 25637-99-4 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8) | 247-148-4 221-695-9 | 0.05 | N.D. | |
| 12 | Lead hydrogen arsenate* | 7784-40-9 | 232-064-2 | 0.005 | N.D. | |
| 13 | Sodium dichromate* (Sodium dichromate, dehydrate) | 10588-01-9 (7789-12-0) | 234-190-3 | 0.005 | N.D. | |
| 14 | 5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene) | 81-15-2 | 201-329-4 | 0.05 | N.D. | |
| 15 | Triethyl arsenate* | 15606-95-8 | 427-700-2 | 0.005 | N.D. | |
| 16 | Di-isobutyl phthalate(DIBP) | 84-69-5 | 201-553-2 | 0.05 | N.D. | |
| 17 | 2,4-Dinitrotoluene | 121-14-2 | 204-450-0 | 0.05 | N.D. | |
| 18 | Tris(2-chloroethyl) phosphate | 115-96-8 | 204-118-5 | 0.05 | N.D. | |
| 19 | Anthracene oil | 90640-80-5 | 292-602-7 | 0.05 | N.D. | |
| 20 | Anthracene oil, anthracene paste;distn. Lights | 91995-17-4 | 295-278-5 | 0.05 | N.D. | |
| 21 | Anthracene oil, anthracene paste, anthracene fraction | 91995-15-2 | 295-275-9 | 0.05 | N.D. | |

| | | | | | | |
|----|---|--------------------------------------|-----------------------------|-------|------|-------|
| 22 | Anthracene oil,anthracene-low | 90640-82-7 | 292-604-8 | 0.05 | N.D. | DOC A |
| 23 | Anthracene oil, anthracene paste | 90640-81-6 | 292-603-2 | 0.05 | N.D. | |
| 24 | Coal tar pitch, high temperature | 65996-93-2 | 266-028-2 | 0.05 | N.D. | |
| 25 | Lead sulfochromate yellow (C.I.Pigment Yellow 34)* | 1344-37-2 | 215-693-7 | 0.005 | N.D. | |
| 26 | Lead chromate molybdate sulfate red(C.I. Pigment Red 104)* | 12656-85-8 | 235-759-9 | 0.005 | N.D. | |
| 27 | Lead chromate* | 7758-97-6 | 231-846-0 | 0.005 | N.D. | |
| 28 | Acrylamide | 79-06-01 | 201-173-7 | 0.05 | N.D. | |
| 29 | Boric acid* | 10043-35-3 11113-50-1 | 233-139-2 234-343-4 | 0.005 | N.D. | |
| 30 | Disodium tetraborate, anhydrous* | 1330-43-4 12179-04-3 1303-96-4 | 215-540-4 | 0.005 | N.D. | |
| 31 | Tetraboron disodium heptaoxide,hydrate* | 12267-73-1 | 235-541-3 | 0.005 | N.D. | |
| 32 | Trichloroethylene | 79-01-6 | 201-167-4 | 0.05 | N.D. | |
| 33 | Sodium chromate* | 7775-11-3 | 231-889-5 | 0.005 | N.D. | |
| 34 | Ammonium dichromate* | 7789-09-5 | 232-143-1 | 0.005 | N.D. | |
| 35 | Potassium dichromate* | 7778-50-9 | 231-906-6 | 0.005 | N.D. | |
| 36 | Potassium chromate* | 7789-00-6 | 232-140-5 | 0.005 | N.D. | |
| 37 | Cobalt(II) sulphate* | 10124-43-3 | 233-334-2 | 0.005 | N.D. | |
| 38 | Cobalt(II) dinitrate* | 10141-05-6 | 233-402-1 | 0.005 | N.D. | |
| 39 | Cobalt(II) carbonate* | 513-79-1 | 208-169-4 | 0.005 | N.D. | |
| 40 | Cobalt(II) diacetate* | 71-48-7 | 200-755-8 | 0.005 | N.D. | |
| 41 | 2-Methoxyethanol | 109-86-4 | 203-713-7 | 0.05 | N.D. | |
| 42 | 2-Ethoxyethanol | 110-80-5 | 203-804-1 | 0.05 | N.D. | |
| 43 | Chromium trioxide* | 1333-82-0 | 215-607-8 | 0.005 | N.D. | |
| 44 | Acids generated from chromium trioxide and their oligomers: Chromic acid Dichromic acid Oligomers of chromic acid and dichromic acid* | 7738-94-5 13530-68-2 - | 231-801-5 236-881-5 - | 0.005 | N.D. | |

| | | | | | | |
|----|---|-----------------------------|------------|-------|------|-------|
| 45 | 1-methyl-2-pyrrolidone | 872-50-4 | 212-828-1 | 0.05 | N.D. | DOC A |
| 46 | 2-ethoxyethyl acetate | 111-15-9 | 203-839-2 | 0.05 | N.D. | |
| 47 | 1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich | 71888-89-6 | 276-158-1 | 0.05 | N.D. | |
| 48 | 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters | 68515-42-4 | 271-084-6 | 0.05 | N.D. | |
| 49 | 1,2,3-trichloropropane | 96-18-4 | 202-486-1 | 0.05 | N.D. | |
| 50 | Hydrazine | 7803-57-8 302-01-2 | 206-114-9 | 0.05 | N.D. | |
| 51 | Strontium chromate* | 7789-06-2 | 232-142-6 | 0.005 | N.D. | |
| 52 | 1,2-Dichloroethane | 107-06-2 | 203-458-1 | 0.05 | N.D. | |
| 53 | 2,2'-dichloro-4,4'-methylenedianiline(MOCA) | 101-14-4 | 202-918-9 | 0.05 | N.D. | |
| 54 | 2-Methoxyanilineo-Anisidine | 90-04-0 | 201-963-1 | 0.05 | N.D. | |
| 55 | 4-(1,1,3,3-tetramethylbutyl) phenol,(4-tert-Octylphenol) | 140-66-9 | 205-426-2 | 0.05 | N.D. | |
| 56 | Aluminosilicate Refractory CeramicFibres* (RCF) | 650-017-00-8 (Index no.) | - | 0.005 | N.D. | |
| 57 | Arsenic acid* | 7778-39-4 | 231-901-9 | 0.005 | N.D. | |
| 58 | Bis(2-methoxyethyl) ether | 111-96-6 | 203-924-4 | 0.05 | N.D. | |
| 59 | Bis(2-methoxyethyl) phthalate | 117-82-8 | 204-212-6- | 0.05 | N.D. | |
| 60 | Calcium arsenate* | 7778-44-1 | 231-904-5 | 0.005 | N.D. | |
| 61 | Dichromium tris(chromate)* | 24613-89-6 | 246-356-2 | 0.005 | N.D. | |
| 62 | Formaldehyde, oligomeric reaction products with aniline (technical MDA) | 25214-70-4 | 500-036-1 | 0.05 | N.D. | |
| 63 | Lead diazide* | 13424-46-9 | 236-542-1 | 0.005 | N.D. | |
| 64 | Lead dipicrate* | 6477-64-1 | 229-335-2 | 0.005 | N.D. | |
| 65 | Lead styphnate* | 15245-44-0 | 239-290-2 | 0.005 | N.D. | |
| 66 | N,N-dimethylacetamide (DMAC) | 127-19-5 | 204-826-4 | 0.05 | N.D. | |
| 67 | Pentazinc chromate octahydroxide* | 49663-84-5 | 256-418-0 | 0.005 | N.D. | |

| | | | | | | |
|----|---|-----------------------------|-----------|-------|------|-------|
| 68 | Phenolphthalein | 77-09-8 | 201-004-7 | 0.05 | N.D. | DOC A |
| 69 | Potassium hydroxyocta-oxodizincatedichromate* | 11103-86-9 | 234-329-8 | 0.005 | N.D. | |
| 70 | Trilead diarsenate* | 3687-31-8 | 222-979-5 | 0.005 | N.D. | |
| 71 | Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)* | 650-017-00-8 (Index no.) | - | 0.005 | N.D. | |
| 72 | 1,2-bis(2-methoxyethoxy) ethane(TEGDME; triglyme) | 112-49-2 | 203-977-3 | 0.05 | N.D. | |
| 73 | 1,2-dimethoxyethane; ethylene glycoldimethyl ether (EGDME) | 110-71-4 | 203-794-9 | 0.05 | N.D. | |
| 74 | Diboron trioxide* | 1303-86-2 | 215-125-8 | 0.005 | N.D. | |
| 75 | Formamide | 75-12-7 | 200-842-0 | 0.05 | N.D. | |
| 76 | Lead(II) bis(methanesulfonate)* | 17570-76-2 | 401-750-5 | 0.005 | N.D. | |
| 77 | TGIC(1,3,5-tris (oxiranyl methyl)- 1,3,5-triazine- 2,4,6(1H,3H,5H)-trione) | 2451-62-9 | 219-514-3 | 0.05 | N.D. | |
| 78 | β -TGIC (1,3,5-tris[(2S and 2R)-2,3- epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)** | 59653-74-6 | 423-400-0 | 0.05 | N.D. | |
| 79 | 4,4'-bis(dimethylamino) benzophenone (Michler's ketone) | 90-94-8 | 202-027-5 | 0.05 | N.D. | |
| 80 | N,N,N',N'-tetramethyl-4,4'- methylenedianiline (Michler's base) | 101-61-1 | 202-959-2 | 0.05 | N.D. | |
| 81 | [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3) | 548-62-9 | 208-953-6 | 0.05 | N.D. | |
| 82 | [4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1- ylidene] dimethylammonium chloride (C.I. Basic Blue 26) | 2580-56-5 | 219-943-6 | 0.05 | N.D. | |
| 83 | α,α -Bis[4-(dimethylamino) phenyl]-4(phenylamino) naphthalene-1- methanol (C.I. Solvent Blue 4) | 6786-83-0 | 229-851-8 | 0.05 | N.D. | |
| 84 | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol | 561-41-1 | 209-218-2 | 0.05 | N.D. | |
| 85 | Bis(pentabromophenyl) ether(DecaBDE) | 1163-19-5 | 214-604-9 | 0.05 | N.D. | |
| 86 | Pentacosfluorotridecanoic acid | 72629-94-8 | 276-745-2 | 0.05 | N.D. | |
| 87 | Tricosfluorododecanoic acid | 307-55-1 | 206-203-2 | 0.05 | N.D. | |

| | | | | | |
|-----|--|---|---|-------|------|
| 88 | Henicosafuoroundecanoic acid | 2058-94-8 | 218-165-4 | 0.05 | N.D. |
| 89 | Heptacosafuorotetradecanoic acid | 376-06-7 | 206-803-4 | 0.05 | N.D. |
| 90 | 4-(1,1,3,3-tetramethylbutyl) phenol,ethoxylated - covering well-defined substances and UVCB substances, polymers and homologues | - | - | 0.05 | N.D. |
| 91 | 4-Nonylphenol, branched and linear – 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 | - | - | 0.05 | N.D. |
| 92 | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) | 123-77-3 | 204-650-8 | 0.05 | N.D. |
| 93 | Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA) | 85-42-7 13149-00-3 14166-21-3 | 201-604-9, 236-086-3, 238-009-9 | 0.05 | N.D. |
| 94 | Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3- methylphthalic anhydride | 25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9 | 247-094-1, 243-072-0, 256-356-4, 260-566-1 | 0.05 | N.D. |
| 95 | Methoxy acetic acid | 625-45-6 | 210-894-6 | 0.05 | N.D. |
| 96 | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear | 84777-06-0 | 284-032-2 | 0.05 | N.D. |
| 97 | Diisopentylphthalate (DIPP) | 605-50-5 | 210-088-4 | 0.05 | N.D. |
| 98 | N-pentyl-isopentylphthalate | - | - | 0.05 | N.D. |
| 99 | 1,2-Diethoxyethane | 629-14-1 | 211-076-1 | 0.05 | N.D. |
| 100 | N,N-dimethylformamide; dimethylformamide | 68-12-2 | 200-679-5 | 0.05 | N.D. |
| 101 | Dibutyltin dichloride (DBT) | 683-18-1 | 211-670-0 | 0.05 | N.D. |
| 102 | Acetic acid, lead salt, basic* | 51404-69-4 | 257-175-3 | 0.005 | N.D. |
| 103 | Basic lead carbonate (trileadbis(carbonate)dihydroxide)* | 1319-46-6 | 215-290-6 | 0.005 | N.D. |
| 104 | Lead oxide sulfate (basic leadsulfate)* | 12036-76-9 | 234-853-7 | 0.005 | N.D. |
| 105 | [Phthalato(2-)]dioxotrilead (dibasiclead phthalate)* | 69011-06-9 | 273-688-5 | 0.005 | N.D. |
| 106 | Dioxobis(stearato)trilead* | 12578-12-0 | 235-702-8 | 0.005 | N.D. |
| 107 | Fatty acids, C16-18, lead salts* | 91031-62-8 | 292-966-7 | 0.005 | N.D. |

DOC A

| | | | | | | |
|-----|--|-------------|-----------|-------|------|-------|
| 108 | Lead bis(tetrafluoroborate)* | 13814-96-5 | 237-486-0 | 0.005 | N.D. | DOC A |
| 109 | Lead cyanamidate* | 20837-86-9 | 244-073-9 | 0.005 | N.D. | |
| 110 | Lead dinitrate* | 10099-74-8 | 233-245-9 | 0.005 | N.D. | |
| 111 | Lead oxide (lead monoxide)* | 1317-36-8 | 215-267-0 | 0.005 | N.D. | |
| 112 | Lead tetroxide (orange lead)* | 1314-41-6 | 215-235-6 | 0.005 | N.D. | |
| 113 | Lead titanium trioxide* | 12060-00-3 | 235-038-9 | 0.005 | N.D. | |
| 114 | Lead Titanium Zirconium Oxide* | 12626-81-2 | 235-727-4 | 0.005 | N.D. | |
| 115 | Pentalead tetraoxide sulphate* | 12065-90-6 | 235-067-7 | 0.005 | N.D. | |
| 116 | Pyrochlore, antimony lead yellow* | 8012-00-8 | 232-382-1 | 0.005 | N.D. | |
| 117 | Silicic acid, barium salt, lead-doped* | 68784-75-8 | 272-271-5 | 0.005 | N.D. | |
| 118 | Silicic acid, lead salt* | 11120-22-2 | 234-363-3 | 0.005 | N.D. | |
| 119 | Sulfurous acid, lead salt, dibasic* | 62229-08-7 | 263-467-1 | 0.005 | N.D. | |
| 120 | Tetraethyllead* | 78-00-2 | 201-075-4 | 0.005 | N.D. | |
| 121 | Tetralead trioxide sulphate* | 12202-17-4 | 235-380-9 | 0.005 | N.D. | |
| 122 | Trilead dioxide phosphonate* | 12141-20-7 | 235-252-2 | 0.005 | N.D. | |
| 123 | Furan | 110-00-9 | 203-727-3 | 0.05 | N.D. | |
| 124 | Propylene oxide; 1,2-epoxypropane;methyloxirane | 75-56-9 | 200-879-2 | 0.05 | N.D. | |
| 125 | Diethyl sulphate | 64-67-5 | 200-589-6 | 0.05 | N.D. | |
| 126 | Dimethyl sulphate | 77-78-1 | 201-058-1 | 0.05 | N.D. | |
| 127 | 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 143860-04-2 | 421-150-7 | 0.05 | N.D. | |
| 128 | Dinoseb | 88-85-7 | 201-861-7 | 0.05 | N.D. | |
| 129 | 4,4'-methylenedi-o-toluidine | 838-88-0 | 212-658-8 | 0.05 | N.D. | |
| 130 | 4,4'-oxydianiline and its salts | 101-80-4 | 202-977-0 | 0.05 | N.D. | |
| 131 | 4-Aminoazobenzene;4-Phenylazoaniline | 60-09-3 | 200-453-6 | 0.05 | N.D. | |
| 132 | 4-methyl-m-phenylenediamine (2,4-toluene-diamine) | 95-80-7 | 202-453-1 | 0.05 | N.D. | |
| 133 | 6-methoxy-m-toluidine(p-cresidine) | 120-71-8 | 204-419-1 | 0.05 | N.D. | |
| 134 | Biphenyl-4-ylamine | 92-67-1 | 202-177-1 | 0.05 | N.D. | |
| 135 | o-aminoazotoluene | 97-56-3 | 202-591-2 | 0.05 | N.D. | |

| | | | | | |
|-----|---|------------|------------------------|-------|------|
| 136 | o-Toluidine; 2-Aminotoluene | 95-53-4 | 202-429-0 | 0.05 | N.D. |
| 137 | N-methylacetamide | 79-16-3 | 201-182-6 | 0.05 | N.D. |
| 138 | 1-bromopropane;n-propyl bromide | 106-94-5 | 203-445-0 | 0.05 | N.D. |
| 139 | Cadmium | 7440-43-9 | 231-152-8 | 0.005 | N.D. |
| 140 | Cadmium oxide* | 1306-19-0 | 215-146-2 | 0.005 | N.D. |
| 141 | Dipentyl phthalate (DPP) | 131-18-0 | 205-017-9 | 0.05 | N.D. |
| 142 | 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] | - | - | 0.05 | N.D. |
| 143 | Ammonium pentadecafluorooctanoate (APFO) | 3825-26-1 | 223-320-4 | 0.05 | N.D. |
| 144 | Pentadecafluorooctanoic acid (PFOA) | 335-67-1 | 206-397-9 | 0.05 | N.D. |
| 145 | Diethyl phthalate | 84-75-3 | 201-559-5 | 0.05 | N.D. |
| 146 | Triethyl phosphate | 25155-23-1 | 246-677-8 | 0.05 | N.D. |
| 147 | Imidazolidine-2-thione; 2-imidazoline-2-thiol | 96-45-7 | 202-506-9 | 0.05 | N.D. |
| 148 | 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) | 1937-37-7 | 217-710-3 | 0.05 | N.D. |
| 149 | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28) | 573-58-0 | 209-358-4 | 0.05 | N.D. |
| 150 | Cadmium sulphide* | 1306-23-6 | 215-147-8 | 0.005 | N.D. |
| 151 | Lead diacetate* | 301-04-2 | 206-104-4 | 0.005 | N.D. |
| 152 | 1,2-Benzenedicarboxylic acid, diethyl ester, branched and linear | 68515-50-4 | 271-093-5 | 0.05 | N.D. |
| 153 | Cadmium chloride* | 10108-64-2 | 233-296-7 | 0.005 | N.D. |
| 154 | Sodium perborate*; perboric acid, sodium salt* | - | 239-172-9 234-390-0 | 0.005 | N.D. |

DOC A

| | | | | | | |
|-----|--|-------------------------------------|------------------------|-------|------|-------|
| 155 | Sodium peroxometaborate* | 7632-04-4 | 231-556-4 | 0.005 | N.D. | DOC A |
| 156 | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) | 3846-71-7 | 223-346-6 | 0.05 | N.D. | |
| 157 | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) | 25973-55-1 | 247-384-8 | 0.05 | N.D. | |
| 158 | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) | 15571-58-1 | 239-622-4 | 0.05 | 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) | - | - | 0.05 | N.D. | |
| 160 | Cadmium fluoride* | 7790-79-6 | 232-222-0 | 0.005 | N.D. | |
| 161 | Cadmium sulphate* | 10124-36-4; 31119-53-6 | 233-331-6 | 0.005 | N.D. | |
| 162 | 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5) | 68515-51-5 68648-93-1 | 271-094-0 272-013-1 | 0.05 | N.D. | |
| 163 | 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 isomers of [1] and [2] or any combination thereof] | - | - | 0.05 | N.D. | |
| 164 | 1,3-propanesultone | 1120-71-4 | 214-317-9 | 0.05 | N.D. | |
| 165 | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327) | 3864-99-1 | 223-383-8 | 0.05 | N.D. | |
| 166 | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) | 36437-37-3 | 253-037-1 | 0.05 | N.D. | |
| 167 | Nitrobenzene | 98-95-3 | 202-716-0 | 0.05 | N.D. | |
| 168 | Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononanoic acid and its sodium and ammonium salts) | 375-95-1 21049-39-8 4149-60-4 | 206-801-3 | 0.05 | N.D. | |
| 169 | Benzo[def]chrysene(Benzo[a]pyrene) | 50-32-8 | 200-028-5 | 0.05 | N.D. | |
| 170 | 4,4'-isopropylidenediphenol(bisphenol A) | 80-05-7 | 201-245-8 | 0.05 | N.D. | |

| | | | | | | |
|-----|--|------------------------------------|-----------------------------|-------|------|-------|
| 171 | 4-Heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well- defined substances which include any of the individual isomers or a combination thereof] | - | - | 0.05 | N.D. | DOC A |
| 172 | Nonadecafluorodecanoic acid(PFDA) and its sodium and ammonium salts | 3108-42-7 335-76-2 3830-45-3 | - 206-400-3 221-470-5 | 0.05 | N.D. | |
| 173 | p-(1,1-dimethylpropyl)phenol | 80-46-6 | 201-280-9 | 0.05 | N.D. | |
| 174 | Perfluorohexane-1-sulphonic acidand its salts | 355-46-4 | 206-587-1 | 0.05 | N.D. | |
| 175 | 1,6,7,8,9,14,15,16,17,17,18,18 Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10] octadeca-7,15-diene (Dechlorane PlusTM) [covering any of its individual anti- and syn-isomersor any combination thereof] | - | - | 0.05 | N.D. | |
| 176 | Benz[a]anthracene | 56-55-3 | 200-280-6 | 0.05 | N.D. | |
| 177 | Cadmium nitrate* | 10325-94-7 | 233-710-6 | 0.005 | N.D. | |
| 178 | Cadmium carbonate* | 513-78-0 | 208-168-9 | 0.005 | N.D. | |
| 179 | Cadmium hydroxide* | 21041-95-2 | 244-168-5 | 0.005 | N.D. | |
| 180 | Chrysene | 218-01-9 | 205-923-4 | 0.05 | N.D. | |
| 181 | Reaction products of 1,3,4- thiazolidine-2, 5-dithione, formaldehyde and 4-heptylphenol,branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branchedand linear] | - | - | 0.05 | N.D. | |
| 182 | Benzo[ghi]perylene (BgP) | 191-24-2 | 205-883-8 | 0.05 | N.D. | |
| 183 | Decamethylcyclotrasiloxane (D5) | 541-02-6 | 208-764-9 | 0.05 | N.D. | |
| 184 | Disodium octaborate* | 12008-41-2 | 234-541-0 | 0.005 | N.D. | |
| 185 | Dodecamethylcyclohexasiloxane (D6) | 540-97-6 | 208-762-8 | 0.05 | N.D. | |
| 186 | Ethylenediamine | 107-15-3 | 203-468-6 | 0.05 | N.D. | |
| 187 | Lead | 7439-92-1 | 231-100-4 | 0.005 | N.D. | |
| 188 | Octamethylcyclotetrasiloxane (D4) | 556-67-2 | 209-136-7 | 0.05 | N.D. | |
| 189 | Terphenyl hydrogenated | 61788-32-7 | 262-967-7 | 0.05 | N.D. | |
| 190 | Dicyclohexyl phthalate(DCHP) | 84-61-7 | 201-545-9 | 0.05 | N.D. | |

| | | | | | | |
|-----|---|-------------|-----------|------|------|-------|
| 191 | Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride; TMA) | 552-30-7 | 209-008-0 | 0.05 | N.D. | DOC A |
| 192 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane | 6807-17-6 | 401-720-1 | 0.05 | N.D. | |
| 193 | Benzo[k]fluoranthene | 207-08-9 | 205-916-6 | 0.05 | N.D. | |
| 194 | Fluoranthene | 206-44-0 | 205-912-4 | 0.05 | N.D. | |
| 195 | Phenanthrene | 85-01-8 | 201-581-5 | 0.05 | N.D. | |
| 196 | Pyrene | 129-00-0 | 204-927-3 | 0.05 | N.D. | |
| 197 | 1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one | 15087-24-8 | 239-139-9 | 0.05 | N.D. | |
| 198 | 2,3,3,3-tetrafluoro-2- (heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof) | - | - | 0.05 | N.D. | |
| 199 | 2-methoxyethyl acetate | 110-49-6 | 203-772-9 | 0.05 | N.D. | |
| 200 | Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP) | - | - | 0.05 | N.D. | |
| 201 | 4-tert-butylphenol | 98-54-4 | 202-679-0 | 0.05 | N.D. | DOC B |
| 202 | 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | 119313-12-1 | 404-360-3 | 0.05 | N.D. | |
| 203 | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 | 400-600-6 | 0.05 | N.D. | |
| 204 | Diisohexyl phthalate | 71850-09-4 | 276-090-2 | 0.05 | N.D. | |
| 205 | Perfluorobutane sulfonic acid (PFBS) and its salts | - | - | 0.05 | N.D. | |
| 206 | 1-vinylimidazole | 1072-63-5 | 214-012-0 | 0.05 | N.D. | |
| 207 | 2-methylimidazole | 693-98-1 | 211-765-7 | 0.05 | N.D. | |
| 208 | Butyl 4-hydroxybenzoate | 94-26-8 | 202-318-7 | 0.05 | N.D. | |
| 209 | Dibutylbis(pentane-2,4-dionato- O,O')tin | 22673-19-4 | 245-152-0 | 0.05 | N.D. | |
| 210 | bis(2-(2-methoxyethoxy)ethyl) ether | 143-24-8 | 205-594-7 | 0.05 | N.D. | |

| | | | | | | |
|-----|--|---|---|------|------|-------|
| 211 | Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety | - | - | 0.05 | N.D. | DOC C |
|-----|--|---|---|------|------|-------|

***Remark** refers to the source documents containing the details of the product test results issued by SGS Korea Co., Ltd. We therefore guarantee that our products are compliant with the regulations.

DOC A : SGS File Number AYAA20-20277

DOC B : SGS File Number AYAA21-09777

DOC C : SGS File Number AYAA21-09778

Note:

1. RL = Reporting Limit, 0.1% (w/w) = 1,000 ppm = 1,000 mg/kg
2. N.D. = Not detected (< RL)
N.A. = Not applicable for respective material type.

The submitted sample was found to contain significant amount of specific element(s) of SVHC. Upon further test verification and also information provided from client, the possibility that the element(s) content originate from SVHC is very unlikely, even though their presence cannot be exclude entirely. It may be assumed that the detectedelement(s) have a non-SVHC source.

3. *.The test result is based on the calculation of selected element(s) / marker(s) and to the worst-case scenario. For detail information, please refer to the SGS REACH website: www.reach.sgs.com/substance-of-very-high-concern-analysis-information-page.htm
The client is advised to review the chemical formulation to ascertain above metal substances present in the article. RL = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, sodium, chromium, chromium(VI), silicon,aluminum, zirconium, boron, and potassium respectively), except molybdenum RL=0.0005%
4. **. -TGIC is one of the isomers for TGIC compounds and hence, tested together. The reported test result is basedthe proposed ratio as according to ECHA dossier.
5. ***.The sample was diluted with solvent because of matrix effect, so there could be slight increase in MDL and itmay have an effect on RL.
6. The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
7. This test report is not related to Korea Laboratory Accreditation Scheme.