

## Subject : SVHC under REACH regulation (rev.15)

Dear most valued customer

This is to certify that KEPITAL products manufactured by Korea Engineering Plastics Co., Ltd. do not contain SVHC(Substances of Very High Concern) under REACH regulation(EC No 1907/2006) listed below ;

***\* Current number of substances in the Candidate List = 168, Updated on 17/12/2015***

Substance name	CAS No.
1,2,3-Trichloropropane	96-18-4
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4
1-Methyl-2-pyrrolidone	872-50-4
2,4-Dinitrotoluene	121-14-2
2-Ethoxyethanol	110-80-5
2-Ethoxyethyl acetate	111-15-9
2-Methoxyethanol	109-86-4
4,4'- Diaminodiphenylmethane (MDA)	101-77-9
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2
Acrylamide	79-06-1
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8
Ammonium dichromate	7789-09-5
Anthracene	120-12-7
Anthracene oil	90640-80-5
Anthracene oil, anthracene paste	90640-81-6
Anthracene oil, anthracene paste, anthracene fraction	91995-15-2
Anthracene oil, anthracene paste, distn. Lights	91995-17-4
Anthracene oil, anthracene-low	90640-82-7
Benzyl butyl phthalate (BBP)	85-68-7

Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7
Bis(tributyltin)oxide (TBTO)	56-35-9
Boric acid	10043-35-3 / 11113-50-1
Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid	7738-94-5 - 13530-68-2
Chromium trioxide	1333-82-0
Cobalt dichloride	7646-79-9
Cobalt(II) carbonate	513-79-1
Cobalt(II) diacetate	71-48-7
Cobalt(II) dinitrate	10141-05-6
Cobalt(II) sulphate	10124-43-3
Diarsenic pentaoxide	1303-28-2
Diarsenic trioxide	1327-53-3
Dibutyl phthalate (DBP)	84-74-2
Diisobutyl phthalate	84-69-5
Disodium tetraborate, anhydrous	1303-96-4/ 1330-43-4/ 12179-04-3
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)
Hydrazine	302-01-2 / 7803-57-8
Lead chromate	7758-97-6
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8
Lead hydrogen arsenate	7784-40-9
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2
Pitch, coal tar, high temp.	-

Potassium chromate	7789-00-6
Potassium dichromate	7778-50-9
Sodium chromate	7775-11-3
Sodium dichromate	7789-12-0/ 10588-01-9
Strontium chromate	7789-06-2
Tetraboron disodium heptaoxide, hydrate	12267-73-1
Trichloroethylene	79-01-6
Triethyl arsenate	15606-95-8
Tris(2-chloroethyl)phosphate	115-96-8
Zirconia Aluminosilicate Refractory Ceramic Fibres <i>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:</i> <i>a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges</i> <i>b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm).</i> <i>c) alkaline oxide and alkali earth oxide(Na<sub>2</sub>O+K<sub>2</sub>O+CaO+MgO+BaO) content less or equal to 18% by weight</i>	
Calcium arsenate	7778-44-1
Bis(2-methoxyethyl) ether	111-96-6
Aluminosilicate Refractory Ceramic Fibres <i>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:</i> <i>a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges</i> <i>b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm)</i> <i>c) alkaline oxide and alkali earth oxide (Na<sub>2</sub>O+K<sub>2</sub>O+CaO+MgO+BaO) content less or equal to 18% by weight</i>	
Potassium hydroxyoctaoxidizincatedichromate	11103-86-9
Lead dipicrate	6477-64-1
N,N-dimethylacetamide	127-19-5
Arsenic acid	7778-39-4

2-Methoxyaniline; o-Anisidine	90-04-0
Trilead diarsenate	3687-31-8
1,2-dichloroethane	107-06-2
Pentazinc chromate octahydroxide	49663-84-5
4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9
Formaldehyde, oligomeric reaction products with aniline	25214-70-4
Bis(2-methoxyethyl) phthalate	117-82-8
Lead diazide, Lead azide	13424-46-9
Lead styphnate	15245-44-0
2,2'-dichloro-4,4'-methylenedianiline	101-14-4
Phenolphthalein	1977-09-08
Dichromium tris(chromate)	24613-89-6
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4
[4-[[4-anilino-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
Formamide	75-12-7
Lead(II) bis(methanesulfonate)	17570-76-2
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
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2
Diboron trioxide	1303-86-2
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
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1
$\alpha,\alpha$ -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)]	6786-83-0
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium 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)]	548-62-9

Lead cyanamidate	20837-86-9
Sulfurous acid, lead salt, dibasic	62229-08-7
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3
Fatty acids, C16-18, lead salts	91031-62-8
Diisopentylphthalate	605-50-5
Biphenyl-4-ylamine	92-67-1
Orange lead (lead tetroxide)	1314-41-6
4,4'-oxydianiline and its salts	101-80-4
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
o-aminoazotoluene	97-56-3
Trilead dioxide phosphonate	12141-20-7
Methyloxirane (Propylene oxide)	75-56-9
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7
Methoxyacetic acid	625-45-6
1-bromopropane (n-propyl bromide)	106-94-5
Heptacosafuorotetradecanoic acid	376-06-7
Tricosafuorododecanoic acid	307-55-1
Pentacosafuorotridecanoic acid	72629-94-8
Pentalead tetraoxide sulphate	12065-90-6
Tetraethyllead	78-00-2
Dioxobis(stearato)trilead	12578-12-0
N-pentyl-isopentylphthalate	776297-69-9
Tetralead trioxide sulphate	12202-17-4
1,2-Diethoxyethane	629-14-1
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7
N-methylacetamide	79-16-3
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5
[Phthalato(2-)]dioxotrilead	69011-06-9
Acetic acid, lead salt, basic	51404-69-4

Lead titanium trioxide	12060-00-3
Lead oxide sulfate	12036-76-9
Dimethyl sulphate	77-78-1
Diethyl sulphate	64-67-5
4,4'-methylenedi-o-toluidine	838-88-0
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]	
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	
N,N-dimethylformamide	68-12-2
Furan	110-00-9
Trilead bis(carbonate)dihydroxide	1319-46-6
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
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2
o-Toluidine	95-53-4
Lead monoxide (lead oxide)	1317-36-8
Lead titanium zirconium oxide	12626-81-2
4-Aminoazobenzene	60-09-3
Silicic acid, lead salt	11120-22-2
Lead dinitrate	10099-74-8
Lead bis(tetrafluoroborate)	13814-96-5
Dibutyltin dichloride (DBTC)	683-18-1
Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [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, 13149-00-3, 14166-21-3
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4]	25550-51-0, 19438-60-9,

(including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	48122-14-1, 57110-29-9
Henicosaflluoroundecanoic acid	2058-94-8
6-methoxy-m-toluidine (p-cresidine)	120-71-8
Pyrochlore, antimony lead yellow	8012-00-8
Cadmium oxide	1306-19-0
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]	
Dipentyl phthalate (DPP)	131-18-0
Pentadecafluorooctanoic acid (PFOA)	335-67-1
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
Cadmium	7440-43-9
Lead di(acetate)	301-04-2
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
Trixylyl phosphate	25155-23-1
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7
Dihexyl phthalate	84-75-3
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
Cadmium sulphide	1306-23-6
Cadmium chloride	10108-64-2
Sodium peroxometaborate	7632-04-4
Sodium perborate; perboric acid, sodium salt	-
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4
Cadmium sulphate	10124-36-4 31119-53-6
Cadmium fluoride	7790-79-6
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1

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)	-
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7
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]	-
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
Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4
Nitrobenzene	98-95-3
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1
1,3-propanesultone	1120-71-4

Disclaimer: The information contained herein is based on our current knowledge and investigations and relates only to the above-mentioned KEPITAL products as delivered in their original packaging. It doesn't relate to any products made of our products with the inclusion of more additives, such as processing aids or colorants. This information should not be construed as a promise or guarantee of specific properties of the products described or their suitability for a particular application. This product is not intended for use in medical and dental implants. Any intellectual property rights are observed.

Should you have any questions, please feel free to contact us.

Kind Regards,



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