



FORMOSA CHEMICALS & FIBRE CORP.

201, Tung Hwa N. Road Taipei, Taiwan

Fax: +886-2-25471382 Tel: +886-2-27122211

Certificate of Product Safety

Dear Sirs :

We hereby certify that the following resin produced by Formosa Chemicals & Fibre Corporation listed below:

TAIRILAC ABS AE10EP, AG1000, AG100H, AG12A0, AG12A1, AG12A1-H, AG12A3, AG12AJ, AG15A0, AG15A1, AG15A1-H, AG15A2, AG15A3, AG15A5, AG15A6, AG15AB, AG15AJ, AG15AM, AG15E0, AG15E1, AG15E1-H, AG15E3, AF3500, AF3535, AF3538, AF3560, AF3600, AX4000, AX4100, AX4300, AG22AT, AG23AT, AG26AT, AG27AT, AT5500, AT5800, AG10NP, AG10AP, AE8000, AE8200, AH2003, ANC100, ANC120,

TAIRILAC ASA WG1700, WG1800, WF3300, WF3301, WE8100, WE810P, WE8500

TAIRISAN SAN NF2100, NF2200, NF2200AE, NX3200, NX3400,

TAI RIREX PS GP5000, GP5250, GP525N, GP5350, GP535A, GP535N, GP535N-1M, GP5500, GP5500-1M, GP5500-1Y, GP550N, GP550N-1Y, MP6500, HP8250, HP8258, HP825F, HP825H, HP9450, GP535P, GP560N, HP825G, HP825T, HP825S, HP825N

TAIRILOY PC/ABS AC2000, AC2100, AC2108, AC2190, AC2300, AC2400, AC2500, AC2508, AC25BM, AC3100, AC3100AF, AC3108, AC3208, AC3250

TAIRILITE PC AC111(X), AC2120, AC2820, AC3600, AC3610, AC3630, AC3700, AC3710, AC3800, AC3900, AC285(X), AC291(X), AC293(X), AC294(X), AC295(X), AC383(X), AC385(X), AC386(X), AC387(X), AC388(X), AC389(X), AC6000, AC914(X), AC983(X)

Conforms to the requirement that no chemicals as following are added (<1,000 ppm).

The SVHC List of 1st (released by ECHA on 28 Oct. 2008)

REACH SVHC	CAS Number
1 Anthracene	120-12-7
2 4,4'-Diaminodiphenylmethane	101-77-9
3 Dibutyl phthalate	84-74-2
4 Cobalt dichloride	7646-79-9
5 Diarsenic pentaoxide	1303-28-2
6 Diarsenic trioxide	1327-53-3
7 Sodium dichromate	7789-12-0 10588-01-9
8 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2

REACH SVHC	CAS Number
9 Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7
10 Hexabromocyclododecane (HBCDD)	25637-99-4 3194-55-6 134237-51-7 134237-50-6 134237-52-8
11 Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8
12 Bis(tributyltin)oxide	56-35-9
13 Lead hydrogen arsenate	7784-40-9
14 Triethyl arsenate	15606-95-8
15 Benzyl butyl phthalate	85-68-7



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The SVHC List of 2nd (released by ECHA on 13 Jan. 2010)

REACH SVHC	CAS Number
1 Anthracene oil	90640-80-5
2 Anthracene oil, anthracene paste, distn. lights	91995-17-4
3 Anthracene oil, anthracene paste, anthracene fraction	91995-15-2
4 Anthracene oil, anthracene-low	90640-82-7
5 Anthracene oil, anthracene paste	90640-81-6
6 Coal tar pitch, high temperature	65996-93-2
7 Acrylamide	79-06-1

REACH SVHC	CAS Number
8 2,4-Dinitrotoluene	121-14-2
9 Diisobutyl phthalate	84-69-5
10 Lead chromate	7758-97-6
11 Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8
12 Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2
13 Tris(2-chloroethyl)phosphate	115-96-8

The SVHC List of 3rd (released by ECHA on 18 Jun.2010)

REACH SVHC	CAS Number
1 Trichloroethylene	79-01-6
2 Boric acid	10043-35-3; 11113-50-14
3 Disodium tetraborate, anhydrous	1330-43-4; 12179-04-3; 1303-96-4
4 Tetraboron disodium heptaoxide, hydrate	12267-73-1

REACH SVHC	CAS Number
5 Sodium chromate	7775-11-3
6 Potassium chromate	7789-00-6
7 Ammonium dichromate	7789-09-5
8 Potassium dichromate	7778-50-9

The SVHC List of 4th (released by ECHA on 15 Dec.2010)

REACH SVHC	CAS Number
1 Cobalt sulfate	10124-43-3
2 Cobalt dinitrate	10141-05-6
3 Cobalt carbonate	513-79-1
4 Cobalt diacetate	71-48-7

REACH SVHC	CAS Number
5 2-Methoxyethanol	109-86-4
6 2-Ethoxyethanol	110-80-5
7 Chromium trioxide	1333-82-0
8 Chromic acid; Dichromic acid	7738-94-5; 13530-68-2



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The SVHC List of 5th (released by ECHA on 20 Jun.2011)

REACH SVHC	CAS Number
1 2-ethoxyethyl acetate	111-15-9
2 strontium chromate	7789-06-2
3 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4
4 Hydrazine	7803-57-8; 302-01-2

REACH SVHC	CAS Number
5 1-methyl-2-pyrrolidone	872-50-4
6 1,2,3-trichloropropane	96-18-4
7 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6

The SVHC List of 6th (released by ECHA on 19 Dec.2011)

REACH SVHC	CAS Number
1 Dichromium tris(chromate)	24613-89-6
2 Potassium hydroxyoctaoxodizincatedi-chromate	11103-86-9
3 Pentazinc chromate octahydroxide	49663-84-5

REACH SVHC	CAS Number
4 Bis(2-methoxyethyl) ether	111-96-6
5 Arsenic acid	7778-39-4
6 Calcium arsenate	7778-44-1

7 Aluminosilicate Refractory Ceramic Fibres (RCF)*1	-
8 Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)*2	-
9 Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4
10 Bis(2-methoxyethyl) phthalate	117-82-8
11 2-Methoxyaniline; o-Anisidine	90-04-0
12 4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9
13 1,2-Dichloroethane	107-06-2

14 Trilead diarsenate	3687-31-8
15 N,N-dimethylacetamide (DMAC)	127-19-5
16 2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4
17 Phenolphthalein	77-09-8
18 Lead azide Lead diazide	13424-46-9
19 Lead styphnate	15245-44-0
20 Lead dipicrate	6477-64-1



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The SVHC List of 7th (released by ECHA on 18 June. 2012)

REACH SVHC	CAS Number
1 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2
2 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4
3 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1
4 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8
5 [4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9
6 [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
7 Diboron trioxide	1303-86-2

REACH SVHC	CAS Number
8 Formamide	75-12-7
9 Lead(II) bis(methanesulfonate)	17570-76-2
10 N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1
11 TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9
12 α,α -Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0
13 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

The Candidate SVHC List of 8th (released by ECHA on 19 Dec. 2012)

REACH SVHC	CAS Number
1 Bis(pentabromophenyl)ether(De caBDE)	1163-19-5
2 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	--
3 Diazene-1,2-dicarboxamide(C, C'-azodi(formamide))	123-77-3
4 4-(1,1,3,3-tetramethylbuty)phenol, ethoxylated-covering well-defined substances and UVCB substances, polymers and homologues	--
5 Henicosafuoroundecanoic acid	2058-94-8
6 Pentacosafuorotridecanoic acid	72629-94-8

REACH SVHC	CAS Number
7 Acetic acid, lead salt, basic	51404-69-4
8 Dimethyl sulphate	77-78-1
9 Furan	110-00-9
10 Pyrochlore, antimony lead yellow	8012-00-8
11 Tetraethyllead	78-00-2
12 [Phthalato(2-)]dioxotrilead	69011-06-9



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13	Cyclohexane-1,2-dicarboxylic anhydride	85-42-7	32	Diethyl sulphate	64-67-5
14	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,	33	Lead cyanamidate	20837-86-9
15	Heptacosafuorotetradecanoic acid	376-06-7	34	Silicic acid, barium salt, lead-doped	68784-75-8
16	Diisopentylphthalate	605-50-5	35	Trilead dioxide phosphonate	12141-20-7
17	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	36	o-Toluidine; 2-Aminotoluene	95-53-4
18	N-pentyl-isopentylphthalate	776297-69-9	37	o-aminoazotoluene	97-56-3
19	Methoxy acetic acid	625-45-6	38	4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3
20	Tricosafuorododecanoic acid	307-55-1	39	6-methoxy-m-toluidine(p-cresidine)	120-71-8
21	1,2-Diethoxyethane	629-14-1	40	Dibutyltin dichloride(DBT)	683-18-1
22	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	41	Lead Titanium Zirconium Oxide	12626-81-2
23	4-methyl-m-phenylenediamine(2,4-toluenediamine)	95-80-7	42	Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9
24	N-methylacetamide	79-16-3	43	1-bromopropane	106-94-5
25	Pentaleadtetraoxidesulphate	12065-90-6	44	Basic lead carbonate(trileadbis(carbonate)dihydroxide)	1319-46-6
26	Biphenyl-4-ylamine	92-67-1	45	Fatty acids, C16-18, lead salts	91031-62-8
27	Dinoseb	88-85-7	46	Lead tetroxide(orange lead)	1314-41-6
28	Dioxobis(stearato)trilead	12578-12-0	47	Sulfurous acid, lead salt, dibasic	62229-08-7
29	Lead dinitrate	10099-74-8	48	4,4'-oxydianiline and its salts	101-80-4
30	Tetralead trioxide sulphate	12202-17-4	49	Lead oxide sulphate	12036-76-9
31	Lead oxide(lead monoxide)	1317-36-8	50	Lead bis(tetrafluoroborate)	13814-96-6



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51	Lead titanium trioxide	12060-00-3
52	4,4' -methylenedi-o-toluidine	838-88-0

53	Silicic acid, lead salt	11120-22-2
54	N,N-dimethylformamide; dimethyl formamide	68-12-2

The SVHC List of 9th (released by ECHA on 20 June 2013)

REACH SVHC		CAS Number
1	Cadmium	7440-43-9
2	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
3	Pentadecafluorooctanoic acid (PFOA)	335-67-1

REACH SVHC		CAS Number
4	Dipentyl phthalate (DPP)	131-18-0
5	4-Nonylphenol, branched and linear, ethoxylated	--
6	Cadmium oxide	1306-19-0

The SVHC List of 10th (released by ECHA on 16 Dec. 2013)

REACH SVHC		CAS Number
1	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
2	Dihexyl phthalate	84-75-3
3	Cadmium sulphide	1306-23-6

REACH SVHC		CAS Number
4	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
5	Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7
6	Lead di(acetate)	301-04-2
7	Trixylyl phosphate	25155-23-1

The SVHC List of 11th (released by ECHA on 16 June 2014)

REACH SVHC		CAS Number
1	Cadmium chloride	10108-64-2
2	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4

REACH SVHC		CAS Number
3	Sodium peroxometaborate	7632-04-4
4	Sodium perborate; perboric acid, sodium salt	--



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The SVHC List of 12th (released by ECHA on 17 Dec. 2014)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	Cadmium fluoride	7790-79-6	4	Cadmium sulphate	10124-36-4; 31119-53-6
2	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	5	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
3	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	6	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)	--

The SVHC List of 13th (released by ECHA on 15 June 2015)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	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	2	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]	--

The SVHC List of 14th (released by ECHA on 17 Dec. 2015)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	1,3-propanesultone	1120-71-4	4	Nitrobenzene	98-95-3
2	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	5	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
3	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4			

The SVHC List of 15th (released by ECHA on 20 June 2016)

REACH SVHC		CAS Number
1	Benzo[def]chrysene	50-32-8



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The SVHC List of 16th (released by ECHA on 12 Jan. 2017)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	4,4'-isopropylidenediphenol	80-05-7	3	4-Heptylphenol, branched and linear	--
2	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts Nonadecafluorodecanoic acid Ammonium nonadecafluorodecanoate Decanoic acid, nonadecafluoro-, sodium salt	335-76-2 3108-42-7 3830-45-3	4	p-(1,1-dimethylpropyl)phenol	80-46-6

The SVHC List of 17th (released by ECHA on 7 July 2017)

REACH SVHC		CAS Number
1	Perfluorohexane-1-sulphonic acid and its salts	--

The SVHC List of 18th (released by ECHA on 15 Jan. 2018)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	Benz[a]anthracene	56-55-3, 1718-53-2	5	Cadmium carbonate	513-78-0
2	Cadmium hydroxide	21041-95-2	6	Cadmium nitrate	10022-68-1, 10325-94-7
3	Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus" TM)	--	7	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	--
4	Chrysene	218-01-9, 1719-03-5			

The SVHC List of 19th (released by ECHA on 27 June 2018)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	Octamethylcyclotetrasiloxane (D4)	556-67-2	6	Benzo[ghi]perylene	191-24-2
2	Decamethylcyclopentasiloxane (D5)	541-02-6	7	Terphenyl hydrogenated	61788-32-7
3	Dodecamethylcyclohexasiloxane (D6)	540-97-6	8	Ethylenediamine (EDA)	107-15-3
4	Lead	7439-92-1	9	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7
5	Disodium octaborate	12008-41-2	10	Dicyclohexyl phthalate (DCHP)	84-61-7



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The SVHC List of 20 th (released by ECHA on 15 Jan. 2019)

REACH SVHC		CAS Number	REACH SVHC		CAS Number
1	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	4	Pyrene	129-00-0; 1718-52-1
2	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	5	Fluoranthene	206-44-0; 93951-69-0
3	Benzo[k]fluoranthene	207-08-9	6	Phenanthrene	85-01-8

Sincerely Yours,

C C Chen

C. C. Chen

Department Manager

Plastics Division

