



Effective: 03/25/2018

## **REACH SVHC Certification**

Reference: All Amphenol Spectra-Strip Products

Amphenol Spectra-Strip is committed to conserving natural resources by reusing or recycling materials and developing, manufacturing, and marketing cable products that are safe for their intended use and protective of the environment.

To meet these objectives, Amphenol Spectra-Strip established its Spectra-Green process, which has instituted requirements for the cable products that we sell. The requirements are based, at a minimum, on WEEE (Waste from Electrical and Electronic Equipment), RoHS (Reduction of Hazardous Substances, REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) and California's Proposition 65.

Amphenol Spectra-Strip and its suppliers incorporates the best engineering and scientific judgment, including the use of engineering calculations, materials assays, or a combination thereof, to determine the existence and concentrations of the substances set forth in this certification. In some cases, commodities may be tested for verification. At a minimum, the applicable MSDS sheets will be kept on file.

This certification states the substances of very high concern in the REACH Regulation (EC 1907/2006), which are noted on pages 2 through 9 of this document, are not intentionally added to Amphenol Spectra-Strip products per Article 67. Substances noted in pages 2 through 8 encompass Annex XVII (including all amendments).

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**Candidate List of REACH Substances of Very High Concern (SVHC)**

<b>Date of Inclusion October 28, 2008</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
4,4'-Methylenedianiline	202-974-4	101-77-9
Bis(tributyltin) oxide	200-268-0	56-35-9
Benzy butyl phthalate	201-622-7	85-68-7
Anthracene	204-371-1	120-12-7
Triethyl arsenate	427-700-2	15606-95-8
Hexabromocyclododecane (HBCDD), $\alpha$ -HBCDD, $\beta$ -HBCDD and $\gamma$ -HBCDD	247-148-4 221-695-9	25637-99-4 3194- 55-6 134237-50- 6 134237-51-7 134237-52-8
5- <i>tert</i> -butyl-2,4,6-trinitro- <i>m</i> -xylene (musk xylene)	201-329-4	81-15-2
Alkanes, C10-13, chloro (short chain chlorinated paraffins)	287-476-5	85535-84-8
Cobalt (2+) dichloride	231-589-4	7646-79-9
Sodium dichromate, dihydrate	234-190-3	7789-12-0 10588-01-9
Di(2-ethylhexyl) phthalate	204-211-0	117-81-7
Lead hydrogen arsenate	232-064-2	7784-40-9
Diarsenic pentoxide	215-116-9	1303-28-2
Disarsenic trioxide	215-481-4	1327-53-3
Dibutyl phthalate	201-557-4	84-74-2

<b>Date of Inclusion January 13, 2010</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
Anthracene oil	292-602-7	90640-80-5
Anthracene oil, anthracene paste, distillation lights	295-278-5	91995-17-4
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2
Anthracene oil, anthracene-low	292-604-8	90640-82-7
Anthracene oil, anthracene paste	292-603-2	90640-81-6
Diisobutyl phthalate (DIBP)	201-553-2	84-69-5
2,4-Dinitrotoluene	204-450-0	121-14-2
Coal tar pitch, high temperature	266-028-2	65996-93-2
Tris(2-chloroethyl) phosphate	204-118-5	115-96-8
Aluminosilicate, refractory ceramic fibers	Index No. 650-017-00-8	
Zirconia aluminosilicate, refractory ceramic fibers	Index No. 650-017-00-8	
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2
Lead chromate molybdate sulfate red (C.I. Pigment Red 104)	235-759-9	12656-85-8
Lead chromate	231-846-0	7758-97-6
Acrylamide	201-173-7	79-06-1



<b>Date of Inclusion June 18, 2010</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
Trichloroethylene	201-167-4	79-01-6
Boric Acid	233-139-2	10043-35-3
	234-343-4	11113-50-1
Disodium tetraborate, anhydrous	215-540-4	1303-96-4
		1330-43-4
		12179-04-3
Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
Sodium chromate	231-889-5	7775-11-3
Potassium chromate	232-140-5	7789-00-6
Ammonium dichromate	232-143-1	7789-09-5
Potassium dichromate	231-906-6	7778-50-9

<b>Date of Inclusion December 15, 2010</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
2-Ethoxyethanol	203-804-1	110-80-5
2-Methoxyethanol	203-713-7	109-86-4
Chromic acid, oligomers of chromic acid and dichromic acid, dichromic acid	231-801-5	7738-94-5
		236-881-5
Chromium trioxide	215-607-8	1333-82-0
Cobalt (II) carbonate	208-169-4	513-79-1
Cobalt (II) diacetate	200-755-8	71-48-7
Cobalt (II) dinitrate	233-402-1	10141-05-6
Cobalt (II) sulphate	233-334-2	10124-43-3

<b>Date of Inclusion June 20, 2011</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
1,2-Benzenedicarboxylic acid, di-C6-8 branched alkyl esters, C7-rich	276-158-1	71888-89-6
1,2-Benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters	271-084-6	68515-42-4
1,2,3-Trichloropropane	202-486-1	96-18-4
1-Methyl-2-pyrrolidone	212-828-1	872-50-4
2-Ethoxyethyl acetate	203-839-2	111-15-9
Cobalt dichloride	231-589-4	7646-79-9
Hydrazine	206-114-9	7803-57-8
		302-01-2
Strontium chromate	232-142-6	7789-06-2



<b>Date of Inclusion December 19, 2011</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
4-tert-Octylphenol	205-426-2	140-66-9
2-Methoxyaniline	201-963-1	90-04-0
Arsenic acid	231-901-9	7778-39-4
Calcium arsenate	231-904-5	7778-44-1
Trilead diarsenate	222-979-5	3687-31-8
1,2-Dichloroethane	203-458-1	107-06-2
Bis(2-methoxyethyl) ether	203-924-4	111-96-6
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
N,N-Dimethylacetamide (DMAC)	204-826-4	127-19-5
Formaldehyde, oligomeric reaction products with aniline (MDA)	500-036-1	25214-70-4
Lead diazide	236-542-1	13424-46-9
Lead styphnate	239-290-0	15245-44-0
2,2'-Dichloro-4,4'-methylenedianiline (MOCA)	202-918-9	101-14-4
Dichromium tris(chromate)	246-356-2	24613-89-6
Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9
Pentazinc chromate octahydroxide	256-418-0	49663-84-5
Phenolphthalein	201-004-7	77-09-8
Aluminosilicate refractory ceramic fibers (RCF)	NA	NA
Zirconia aluminosilicate refractory ceramic fibers (Zr-RCF)	NA	NA
Lead dipicrate	229-335-2	6477-64-1

<b>Date of Inclusion June 18, 2012</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	209-218-2	561-41-1
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8
[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	208-953-6	548-62-9
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene] cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Blue 26)	219-943-6	2580-56-5
Diboron trioxide	215-125-8	1303-86-2
Formamide	200-842-0	75-12-7
Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1
α,α-Bis[4-dimethylamino]phenyl]-4-(phenylamino) naphthalene-1- methanol (C.I. Solvent Blue 4)	229-851-8	6786-83-0
TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H, 3H, 5H)- trione)	219-514-3	2451-62-9
β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6- (1H, 3H, 5H)-trione)	423-400-0	59653-74-6



Date of Inclusion December 19, 2012

Substance	EC No.	CAS No.
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8
6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8
Henicosfluoroundecanoic acid	218-165-4	2058-94-8
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] (including their cis- and trans-stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9
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]	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3
Dibutyltin dichloride (DBTC)	211-670-0	683-18-1
Lead bis(tetrafluoroborate)	237-486-0	13814-96-5
Lead dinitrate	233-245-9	10099-74-8
Silicic acid, lead salt	234-363-3	11120-22-2
4-Aminoazobenzene	200-453-6	60-09-3
Lead titanium zirconium oxide	235-727-4	12626-81-2
Lead monoxide (lead oxide)	215-267-0	1317-36-8
o-Toluidine	202-429-0	95-53-4
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2
Silicic acid (H <sub>2</sub> SiO <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]	272-271-5	68784-75-8
Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6
Furan	203-727-3	110-00-9
N,N-dimethylformamide	200-679-5	68-12-2
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-
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]	-	-
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0
Diethyl sulphate	200-589-6	64-67-5
Dimethyl sulphate	201-058-1	77-78-1
Lead oxide sulfate	234-853-7	12036-76-9
Lead titanium trioxide	235-038-9	12060-00-3
Acetic acid, lead salt, basic	257-175-3	51404-69-4
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5
N-methylacetamide	201-182-6	79-16-3
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7
1,2-Diethoxyethane	211-076-1	629-14-1
Tetralead trioxide sulphate	235-380-9	12202-17-4
N-pentyl-isopentylphthalate	-	776297-69-9
Dioxobis(stearato)trilead	235-702-8	12578-12-0
Tetraethyllead	201-075-4	78-00-2
Pentalead tetraoxide sulphate	235-067-7	12065-90-6
Pentacosfluorotridecanoic acid	276-745-2	72629-94-8



Tricosafuorododecanoic acid	206-203-2	307-55-1
Heptacosafuorotetradecanoic acid	206-803-4	376-06-7
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5
Methoxyacetic acid	210-894-6	625-45-6
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7
Methyloxirane (Propylene oxide)	200-879-2	75-56-9
Trilead dioxide phosphonate	235-252-2	12141-20-7
o-aminoazotoluene	202-591-2	97-56-3
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0
4,4'-oxydianiline and its salts	202-977-0	101-80-4
Orange lead (lead tetroxide)	215-235-6	1314-41-6
Biphenyl-4-ylamine	202-177-1	92-67-1
Diisopentylphthalate	210-088-4	605-50-5
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3
Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7
Lead cyanamidate	244-073-9	20837-86-9

## Date of Inclusion June 20, 2013

Substance	EC No.	CAS No.
Cadmium	231-152-8	7440-43-9
Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1
Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1
Dipentyl phthalate (DPP)	205-017-9	131-18-0
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]	-	-
Cadmium oxide	215-146-2	1306-19-0



<b>Date of Inclusion December 16, 2013</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
Cadmium sulphide	215-147-8	1306-23-6
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
Dihexyl phthalate	201-559-5	84-75-3
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7
Trixylyl phosphate	246-677-8	25155-23-1
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0
Lead di(acetate)	206-104-4	301-04-2
<b>Date of Inclusion June 16, 2014</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4
Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	-
Sodium peroxometaborate	231-556-4	7632-04-4
Cadmium chloride	233-296-7	10108-64-2

<b>Date of Inclusion December 17, 2014</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
Bis(2-ethylhexyl) phthalate (DEHP)	204-211-0	117-81-7
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	223-346-6	3846-71-7
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	15571-58-1
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-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	25973-55-1
Cadmium fluoride	232-222-0	7790-79-6
Cadmium sulphate	233-331-6	10124-36-4, 31119-53-6

<b>Date of Inclusion June 15, 2015</b>		
<b>Substance</b>	<b>EC No.</b>	<b>CAS No.</b>
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	271-094-0 272-013-1	68515-51-5 68648-93-1
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]	-	-



### Date of Inclusion December 17, 2015

Substance	EC No.	CAS No.
1,3-propanesultone	214-317-9	1120-71-4
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	3864-99-1
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	36437-37-3
Nitrobenzene	202-716-0	98-95-3
Perfluorononan-1-oiic-acid and its sodium and ammonium salts	206-801-3	375-95-1
		21049-39-8
		4149-60-4

### Date of Inclusion June 20, 2016

Substance	EC No.	CAS No.
Benzo[def]chrysene	200-028-5	50-32-8

### Date of Inclusion January 12, 2017

Substance	EC No.	CAS No.
4,4'-isopropylidenediphenol (Bisphenol A; BPA)	201-245-8	80-05-7
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)	-	-
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	-	-
Decanoic acid, nonadecafluoro-, sodium salt	-	3830-45-3
Ammonium nonadecafluorodecanoate	221-470-5	3108-42-7
Nonadecafluorodecanoic acid	206-400-3	335-76-2
p-(1,1-dimethylpropyl)phenol	201-280-9	80-46-6

### Date of Inclusion July 07, 2017

Substance	EC No.	CAS No.
Perfluorohexance-1-sulphonic acid and its salts	-	-

### Date of Inclusion January 15, 2018

Substance	EC No.	CAS No.
Benz[a]anthracene	200-280-6	56-55-3 1718-53-2
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 Plus"™)	-	-
Cadmium carbonate	208-168-9	513-78-0
Cadmium hydroxide	244-168-5	21041-95-2
Cadmium nitrate	233-710-6	10022-68-1
		10325-94-7
Chrysene	205-923-4	218-01-9 1719-03-5
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	-





## Date of Inclusion June 27, 2018

Substance	EC No.	CAS No.
Benzene-1,2,4-tricarboxylic acid 1,2 anhydride	209-008-0	552-30-7
Benzo[ghi]perylene	205-883-8	191-24-2
Decamethylcyclopentasiloxane	208-764-9	541-02-6
Dicyclohexyl phthalate	201-545-9	84-61-7
Disodium octaborate	234-541-0	12008-41-2
Dodecamethylcyclohexasiloxane	208-762-8	540-97-6
Lead	231-100-4	7439-92-1
Ethylenediamine	203-468-6	107-15-3
Octamethylcyclotetrasiloxane	209-136-7	556-67-2
Terphenyl, hydrogenated	262-967-7	61788-32-7

## Date of Inclusion January 15, 2019

Substance	EC No.	CAS No.
2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	6807-17-6
Benzo[k]fluoranthene	205-916-6	207-08-9
Fluoranthene	205-912-4	206-44-0
Phenanthrene	201-581-5	85-01-8
Pyrene	204-927-3	129-00-0
1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	239-139-9	15087-24-8