

Diodes Incorporated RoHS & REACH Compliance

**Re: End of Vehicle Life Directive (EVL) 2000/53/EC and Annex II (EVL II) 2000/53/EC
Restrictions of Hazardous Substances Directive (RoHS) 2002/95/EC & 2011/65/EU (RoHS II)
Waste Electrical and Electronic Equipment (WEEE)
REACH (EC) No 1907/2006 (REACH 151)
Japanese Legislation (Various)
China RoHS
California Proposition 65
IEC 62474 (Replaces JIG 101)**

Diodes Inc. and its subsidiaries including Diodes Zetex Semiconductors Limited have reviewed our manufacturing process and materials along with those of our contractors and suppliers against the above referenced directives.

We hereby declare that all of our products comply fully with the above directives and do not contain any of the following substances except as CURRENTLY exempted* by ELV II and RoHS II or as impurities:

Asbestos
Azo compounds (Azocolourants and Azodyes)
Cadmium and cadmium compounds CAS No 7440-43-9, EC No 231-152-8
Certain Shortchain Chlorinated Paraffins
Chlorinated organic compounds
Dimethyl fumarate
Formaldehyde
Hexavalent chromium compounds (Chromium VI compounds)
Lead and lead compounds
Mercury and mercury compounds
Organic tin compounds
Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Ozone Depleting Substances - Class II (HCFCs)
Perfluorooctane Sulphonate (PFOS)
Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including **DecaBDE**
Polychlorinated Biphenyls (PCBs)
Polychlorinated Naphthalenes (> 3 chlorine atoms)
Polychlorinated Terphenyls (PCTs)
Radioactive Substances
Red Phosphorous
Tributyl Tin (TBT) and Triphenyl Tin (TPT), Dibutyltin (DBT) compounds, Dioctyltin (DOT) compounds
Tributyl Tin Oxide (TBTO)

Our products have never contained PFOS or DecaBDE compounds and no exemptions for these have ever been taken.

GADSL: (Global Automotive Declarable Substance List)

Diodes Incorporated's products may contain permutations of the following substances:

Arsenic: Is used as a dopant in the "chip" or "die".
Antimony Trioxide: Is used as a part of the flame retardant system in non-green product.
Copper: Some products use copper in the leadframe alloy, some others have a copper-plated Alloy 42 leadframe. Copper is increasingly being used internally in product to form connections between the die and the leadframe.
Lead: Some products have a high temperature solder die attach >85% lead, some have lead in the die passivation or the glass encapsulation, others have lead in the copper leadframe alloy. All of these applications are exempted from RoHS.

Rare Earth Metals:

Our products do not contain:

Scandium, Yttrium, Lanthanum, Cerium, Praseodymium, Neodymium, Promethium, Samarium, Europium, Gadolinium, Terbium, Dysprosium, Holmium, Erbium, Thulium, Ytterbium, Ruthenium.

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REACH Substances of Very High Concern (SVHCs) No SVHCs are present in all product versions. ^{1 2}		
Substance Name	EC Number	CAS Number
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 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
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 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
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9
1,2,3-Trichloropropane	202-486-1	96-18-4
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-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2
1,2-dichloroethane	203-458-1	107-06-2
1,2-Diethoxyethane	211-076-1	629-14-1
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	423-400-0	59653-74-6
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5
1-Methyl-2-pyrrolidone	212-828-1	872-50-4
2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4
2,4-Dinitrotoluene	204-450-0	121-14-2
2-Ethoxyethanol	203-804-1	110-80-5
2-Ethoxyethyl acetate	203-839-2	111-15-9
2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0
2-Methoxyethanol	203-713-7	109-86-4
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2
4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-
4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 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
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0
4,4'-oxydianiline and its salts	202-977-0	101-80-4
4-Aminoazobenzene	200-453-6	60-09-3
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7
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]	-	-

REACH Substances of Very High Concern (SVHCs) No SVHCs are present in all product versions.^{1 2}		
Substance Name	EC Number	CAS Number
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]	-	-
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2
6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8
Acetic acid, lead salt, basic	257-175-3	51404-69-4
Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	231-801-5, 236-881-5	7738-94-5, 13530-68-2
Acrylamide	201-173-7	79-06-1
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8
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: 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 (Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18% by weight</i>		
Ammonium dichromate	232-143-1	7789-09-5
Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1
Anthracene	204-371-1	120-12-7
Anthracene oil	292-602-7	90640-80-5
Anthracene oil, anthracene paste	292-603-2	90640-81-6
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2
Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4
Anthracene oil, anthracene-low	292-604-8	90640-82-7
Arsenic acid	231-901-9	7778-39-4
Benzyl butyl phthalate (BBP)	201-622-7	85-68-7
Biphenyl-4-ylamine	202-177-1	92-67-1
Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7
Bis(2-methoxyethyl) ether	203-924-4	111-96-6
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5
Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9
Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1
Cadmium	231-152-8	7440-43-9
Cadmium oxide	215-146-2	1306-19-0
Cadmium sulphide	215-147-8	1306-23-6
Calcium arsenate	231-904-5	7778-44-1
Chromium trioxide	215-607-8	1333-82-0
Cobalt dichloride	231-589-4	7646-79-9
Cobalt(II) carbonate	208-169-4	513-79-1

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Substance Name	EC Number	CAS Number
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
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
Diarsenic pentaoxide	215-116-9	1303-28-2
Diarsenic trioxide	215-481-4	1327-53-3
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3
Diboron trioxide	215-125-8	1303-86-2
Dibutyl phthalate (DBP)	201-557-4	84-74-2
Dibutyltin dichloride (DBTC)	211-670-0	683-18-1
Dichromium tris(chromate)	246-356-2	24613-89-6
Diethyl sulphate	200-589-6	64-67-5
Dihexyl phthalate	201-559-5	84-75-3
Diisobutyl phthalate	201-553-2	84-69-5
Diisopentylphthalate	210-088-4	605-50-5
Dimethyl sulphate	201-058-1	77-78-1
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7
Dioxobis(stearato)trilead	235-702-8	12578-12-0
Dipentyl phthalate (DPP)	205-017-9	131-18-0
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
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
Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8
Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4
Formamide	200-842-0	75-12-7
Furan	203-727-3	110-00-9
Henicosaflluoroundecanoic acid	218-165-4	2058-94-8
Heptacosaflluorotetradecanoic acid	206-803-4	376-06-7
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	247-148-4 and 221-695-9	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)
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
Hydrazine	206-114-9	302-01-2, 7803-57-8
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7

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Substance Name	EC Number	CAS Number
Lead bis(tetrafluoroborate)	237-486-0	13814-96-5
Lead chromate	231-846-0	7758-97-6
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8
Lead cyanamidate	244-073-9	20837-86-9
Lead di(acetate)	206-104-4	301-04-2
Lead diazide, Lead azide	236-542-1	13424-46-9
Lead dinitrate	233-245-9	10099-74-8
Lead dipicrate	229-335-2	6477-64-1
Lead hydrogen arsenate	232-064-2	7784-40-9
Lead monoxide (lead oxide)	215-267-0	1317-36-8
Lead oxide sulfate	234-853-7	12036-76-9
Lead styphnate	239-290-0	15245-44-0
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2
Lead titanium trioxide	235-038-9	12060-00-3
Lead titanium zirconium oxide	235-727-4	12626-81-2
Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2
Methoxyacetic acid	210-894-6	625-45-6
Methyloxirane (Propylene oxide)	200-879-2	75-56-9
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1
N,N-dimethylacetamide	204-826-4	127-19-5
N,N-dimethylformamide	200-679-5	68-12-2
N-methylacetamide	201-182-6	79-16-3
N-pentyl-isopentylphthalate	-	776297-69-9
o-aminoazotoluene	202-591-2	97-56-3
Orange lead (lead tetroxide)	215-235-6	1314-41-6
o-Toluidine	202-429-0	95-53-4
Pentacosafuorotridecanoic acid	276-745-2	72629-94-8
Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1
Pentalead tetraoxide sulphate	235-067-7	12065-90-6
Pentazinc chromate octahydroxide	256-418-0	49663-84-5
Phenolphthalein	201-004-7	77-09-8
Pitch, coal tar, high temp.	266-028-2	65996-93-2
Potassium chromate	232-140-5	7789-00-6
Potassium dichromate	231-906-6	7778-50-9
Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8
Silicic acid (H ₂ Si ₂ O ₅), 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
Silicic acid, lead salt	234-363-3	11120-22-2

REACH Substances of Very High Concern (SVHCs) No SVHCs are present in all product versions.^{1 2}		
Substance Name	EC Number	CAS Number
Sodium chromate	231-889-5	7775-11-3
Sodium dichromate	234-190-3	7789-12-0, 10588-01-9
Strontium chromate	232-142-6	7789-06-2
Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7
Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
Tetraethyllead	201-075-4	78-00-2
Tetralead trioxide sulphate	235-380-9	12202-17-4
Trichloroethylene	201-167-4	79-01-6
Tricosafuorododecanoic acid	206-203-2	307-55-1
Triethyl arsenate	427-700-2	15606-95-8
Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6
Trilead diarsenate	222-979-5	3687-31-8
Trilead dioxide phosphonate	235-252-2	12141-20-7
Tris(2-chloroethyl)phosphate	204-118-5	115-96-8
Trixylyl phosphate	246-677-8	25155-23-1
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: 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 (Na₂O+K₂O+CaO+MgO+BaO) content less or equal to 18% by weight</i>		
α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 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

¹ Trace quantities of SVHCs may be present but are below the reporting threshold.

² Lead Monoxide

EU Decision number ED/169/2012 dated 19 December 2012 added Lead Monoxide (EC number 215-267-0, CAS number 1317-36-8) to REACH Annex XIV as a substance of very high concern (SVHC). Material declarations for certain Diodes Incorporated products declare Lead Monoxide as a substance exceeding 0.1% by weight is present within the die glass passivation and/or glass encapsulation.

Under the REACH regulation, glass is classified as a UVCB substance (substance of unknown or variable composition, complex reaction products or biological material) containing such elements as silicon, calcium, sodium, potassium, magnesium bonded together by oxygen; these elements are bonded into a non-crystalline molecular structure with completely different properties to the starting raw materials. Glass is not a mixture of compounds such as SiO₂, Na₂O, CaO, B₂O₃, PbO, etc.

Since glass itself is not considered hazardous and is not included in the SVHC list, there are no obligations to communicate information according to Article 33 of the REACH regulation concerning SVHC in articles and related to lead monoxide in glass.

REACH ANNEX XVII All products versions do not contain/use these substances in restricted applications

Index No.	Substance name	CAS number	EC Number
1	Polychlorinated terphenyls (PCT)		
2	Chloro-1-ethylene (monomer vinyl chloride)	75-01-4	200-831-0
4	Tris (2,3 dibromopropyl) phosphate	126-72-7	204-799-9
5	Benzene	71-43-2	200-753-7
6a	Crocidolite	12001-28-4	
6b	Amosite	12172-73-5	
6c	Anthophyllite	77536-67-5	
6d	Actinolite	77536-66-4	
6e	Tremolite	77536-68-6	
6f	Chrysotile	12001-29-5 132207-32-0	
7	Tris(aziridinyl)phosphin oxide	5455-55-1	
8	Polybromobiphenyls; Polybrominatedbiphenyls (PBB)	59536-65-1	
9a	Soap bark powder (Quillaja saponaria) and its derivatives containing saponines		
9b	Powder of the roots of Helleborus viridis and Helleborus niger		
9c	Powder of the roots of Veratrum album and Veratrum nigrum		
9f	Wood powder		
9d	Benzidine and/or its derivatives	92-87-5	202-199-1
9e	o-Nitrobenzaldehyde	552-89-6	209-025-3
10a	Ammonium sulphide	12135-76-1	235-223-4
10b	Ammonium hydrogen sulphide	12124-99-1	235-184-3
10c	Ammonium polysulphide	9080-17-5	232-989-1
11a	Volatile esters of bromoacetic acids: Methyl bromoacetate	96-32-2	202-499-2
11b	Ethyl bromoacetate	105-36-2	203-290-9
11c	Propyl bromoacetate	35223-80-4	
11d	Butyl bromoacetate		
12	2-Naphthylamine and its salts	91-59-8	202-080-4
13	Benzidine and/or its derivatives	92-87-5	202-199-1
14	4-Nitrobiphenyl	92-93-3	202-204-7
15	4-Aminobiphenyl xenylamine and its salt	92-67-1	202-177-1
16a	Lead Carbonates: Neutral anhydrous carbonate (PbCO ₃)	598-63-0	209-943-4
16b	Lead Carbonates: Trilead-bis(carbonate)-dihydroxide 2PbCO ₃ -Pb(OH) ₂	1319-46-6	215-290-6
17a	Lead Sulphates: PbSO ₄	7446-14-2	231-198-9
17b	Lead Sulphates: Pb _x SO ₄	15739-80-7	239-831-0
18	Mercury and its compounds	Various	Various
19	Arsenic compounds	Various	
20	Organo stannic compounds	Various	Various
21	Di-μ-oxo-di-n-butylstannio hydroxyborane dibutyltin hydrogen borate C ₈ H ₁₉ BO ₃ Sn (DBB)	75113-37-0	401-040-5
22	Pentachlorophenol and its salts and esters	87-86-5	201-778-6
23	Cadmium and its compounds	7440-43-9	231-152-8
24	Monomethyl — tetrachlorodiphenyl methane Trade name: Ugilec 141	76253-60-6	278-404-3
25	Monomethyl-dichloro-diphenyl methane Trade name: Ugilec 121, Ugilec 21;		
26	Monomethyl-dibromo-diphenyl methane bromobenzyl bromotoluene, mixture of isomers Trade name: DBBT	99688-47-8	402-210-1
27	Nickel	7440-02-0	231-111-4
31a	Creosote; wash oil	8001-58-9	232-287-5
31b	Creosote oil; wash oil	61789-28-4	263-047-8
31c	distillates (coal tar), naphthalene oils; naphthalene oil	84650-04-4	283-484-8
31d	Creosote oil, acenaphthene fraction; wash oil	90640-84-9	292-605-3
31e	distillates (coal tar), upper; heavy anthracene oil	65996-91-0	266-026-1
31f	anthracene oil	90640-80-5	292-602-7
31g	Tar acids, coal, crude; crude phenols	65996-85-2	266-019-3
31h	Creosote, wood	8021-39-4	232-419-1
31i	Low temperature tar oil, alkaline; extract residues (coal), low temperature coal tar alkaline	122384-78-5	310-191-5
32	Chloroform	67-66-3	200-663-8
34	1,1,2 Trichloroethane	79-00-5	201-166-9
35	1,1,2,2 Tetrachloroethane	79-34-5	201-197-8
36	1,1,1,2 Tetrachloroethane	630-20-6	211-135-1
37	Pentachloroethane	76-01-7	200-925-1
38	1,1 Dichloroethylene	75-35-4	200-864-0
41	Hexachloroethane	67-72-1	200-6664
42	Alkanes, C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs)	85535-84-8	287-476-5

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<u>Index No.</u>	<u>Substance name</u>	<u>CAS number</u>	<u>EC Number</u>
43	Azocolourants & Azo Dyes	Various	405-665-4
45	Diphenylether, octabromo derivative C ₁₂ H ₂ Br ₈ O	32536-52-0	251-087-9
46a	Nonylphenol C ₆ H ₄ (OH)C ₉ H ₁₉		
46b	Nonylphenol ethoxylate (C ₂ H ₄ O) _n C ₁₅ H ₂₄ O		
47	Chromium VI compounds	Various	Various
48	Toluene	108-88-3	203-625-9
49	Trichlorobenzene	120-82-1	204-428-0
50a	Polycyclic-aromatic hydrocarbons (PAH): 1. Benzo(a)pyrene (BaP)	50-32-8	
50b	2. Benzo(e)pyrene (BeP)	192-97-2	
50c	3. Benzo(a)anthracene (BaA)	56-55-3	
50d	4. Chrysen (CHR)	218-01-9	
50e	5. Benzo(b)fluoranthene (BbFA)	205-99-2	
50f	6. Benzo(j)fluoranthene (BjFA)	205-82-3	
50g	7. Benzo(k)fluoranthene (BkFA)	207-08-9	
50h	8. Dibenzo(a, h)anthracene (DBAhA)	53-70-3	
51a	Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0
51b	Dibutyl phthalate (DBP)	84-74-2	201-557-4
51c	Benzyl butyl phthalate (BBP)	85-68-7	201-622-7
52a	di-'isononyl' phthalate (DINP)	28553-12-0 68515-48-0	249-079-5 271-090-9
52b	di-'isodecyl' phthalate (DIDP)	28553-12-0 68515-48-0 26761-40-0 68515-49-1 117-84-0	247-977-1 271-091-4 204-214-7
52c	di-n-octyl phthalate (DNOP)	28553-12-0 68515-48-0 26761-40-0 68515-49-1 117-84-0	249-079-5 271-090-9 247-977-1 271-091-4 204-214-7
54	2-(2-methoxyethoxy)ethanol (DEGME)	111-77-3	203-906-6
55	2-(2-butoxyethoxy)ethanol (DEGBE)	112-34-5	203-961-6
56	Methylenediphenyl diisocyanate (MDI)	26447-40-5	247-714-0
56a	4,4'-Methylenediphenyl diisocyanate	101-68-8	202-966-0
56b	2,4'-Methylenediphenyl diisocyanate	5873-54-1	227-534-9
56c	2,2'-Methylenediphenyl diisocyanate	2536-05-2	219-799-4
57	Cyclohexane	110-82-7	203-806-2
58	Ammonium nitrate (AN)	6484-52-2	229-347-8
59	Dichloromethane	75-09-2	200-838-9
60	Acrylamide	79-06-1	201-173-7
61	Dimethylfumarate (DMF)	624-49-7	210-849-0
62a	Phenylmercury acetate	62-38-4	200-532-5
62b	Phenylmercury propionate	103-27-5	203-094-3
62c	Phenylmercury 2-ethylhexanoate	13302-00-6	236-326-7
62d	Phenylmercury octanoate	13864-38-5	
62e	Phenylmercury neodecanoate	26545-49-3	247-783-7
63	Lead and its compounds	7439-92-1	231-100-4

U.S. Department of Labor Federal Standard 29 – CFR Part 1910.1000 and other Substances:

Our products do not contain the following substances (in addition to those stated above):

<u>Substance name</u>	<u>CAS Number</u>
4-Nitrobiphenyl	92-93-3
alpha-Naphthylamine	134-32-7
methyl chloromethyl ether	107-30-2
3,3'-Dichlorobenzidine (and its salts)	91-94-1
bis-Chloromethyl ether	542-88-1
beta-Naphthylamine	91-59-8
Benzidine	92-87-5
4-Aminodiphenyl	92-67-1
Ethyleneimine	151-56-4
beta-Propiolactone	57-57-8
2-Acetylaminofluorene	53-96-3
4-Dimethylaminoazo-benzene	60-11-7
N-Nitrosodimethylamine	62-75-9.

Japanese Laws:

No. 117, 1973, as last amended by Law No.49, 2003. Our products do not contain:

- N,N'> -ditoryl-para-phenylenediamine>
- N-tolyl-N'> -xylyl-para-phenylenediamine
- N> '> -dixyl-paraphenyllenediamine (CAS # 15017-02-4)

No. 32 of September 30, 1972 and Ministry of Health, Labour and Welfare Ordinance No. 47 of March 30, 2007 from the Japan International Center for Occupational Safety and Health. Our products do not contain:

- Mirex > -> CAS # 2385-85-5
- Benzidine and its salts CAS numbers 531-85-1, 92-87-5, 531-86-2
- Benzene paste (benzene 5% or more)

No. 138 of 1970, Water Pollution Control Law, Latest Amendment by Law No. 75 of 1995. Our products do not contain:

- Cyanogen compounds

California Proposition 65

Certain Diodes Inc. products contain lead and/or nickel. These are wholly contained within the devices.

“Green” or “Halogen-free” products are defined as:

1. RoHS and REACH Compliant
2. Bromine <900ppm, Chlorine <900ppm, Bromine+Chlorine <1500ppm, Antimony Compounds <1000ppm.

JEDEC/ECA Halogen-Free Standard JS709A Diodes Incorporated “Green” / “Halogen-free” product meet these requirements.

* The following applicable exemptions are currently outlined in EVL II and RoHS II:

Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)
(Some Diodes Inc. products use this type of solder internally for die attach purposes)

Aluminium containing up to 0.4 % lead by weight,
Copper alloy containing up to 4 % lead by weight

Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.
(Some Diodes Inc. products contain glass passivation at the die level and glass packages contain Lead oxide in the glass)

RoHS exemptions are to be reviewed and may be subject to change at least every four years. Renewal of Exemptions is expected where no viable alternative material is available.

IEC 62474 (Replaces JIG 101)

Certain Diodes Inc. products contain lead (applications are exempted under RoHS).

Products not defined as "Green" or "halogen-free" contain brominated flame retardants (other than PBBs, PBDEs, or HBCDD).

Nickel used within parts does not come into contact with skin in normal usage.

Our products may contain traces of any substance not purposely added and below reporting or detection levels.



David Fitton
Compliance Coordinator
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Date: 3 February 2014