

EPEAT4.7.2.2 Public disclosure of supply chain toxics

The following information comprises the toxic release data, listed in the Japanese Pollutant Release and Transfer Register (PRTR), from suppliers for the following parts/components contained within one EPEAT registered product:

- Integrated circuit/semiconductor
- Display*
- Motor

Information, including calculations, of the substances included in this disclosure was gathered from the following website of Japanese Ministry of Economy, Trade and Industry

(https://www.meti.go.jp/english/press/2019/0305_001.html),

(<https://www.meti.go.jp/press/2019/03/20200319005/20200319005.html> (in japanese))

and/or from supplier investigations.

*We purchase "Display" from a single supplier for the selected EPEAT registered product.

2017 List of PRTR chemical substances

< Integrated circuit/semiconductor >

POTWs :publically (publicly) owned treatment works

supplier 1

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
-	Antimony and its compounds	0	0	0	0	0	7,200
7705-08-0	Ferric chloride	0	0	0	0	0	0
-	Silver and its water-soluble compounds	0	0	0	0	0	0
127-19-5	N,N-dimethylacetamide	0	0	0	0	0	0
11070-44-3	tetrahydrophthalic anhydride	0	0	0	0	0	2,600
95-63-6	1,2,4-Trimethylbenzene	0	0	0	0	0	840
91-20-3	Naphthalene	0	0	0	0	0	0
7439-92-1	Lead	0	0	0	0	0	1,000
7440-02-0	Nickel	0	0	0	0	0	0
-	Hydrogen fluoride and its water-soluble salts	120	0	0	0	0	0
1321-94-4	Methylnaphthalene	0	0	0	0	0	0

supplier 2

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
100-41-4	Ethylbenzene	990	0	0	0	0	0
7705-08-0	Ferric chloride	0	0	0	0	0	0
1330-20-7	Xylene	2,000	0	0	0	0	0
127-19-5	N,N-dimethylacetamide	0	0	0	0	0	0
95-63-6	1,2,4-trimethylbenzene	30	0	0	0	0	0
-	Lead compounds	0	0	0	0	0	26
7440-02-0	Nickel	0	0	0	0	0	0
110-85-0	Piperazine	0	1,200	0	0	0	0
-	Hydrogen fluoride and its water-soluble salts	770	0	0	0	0	0

supplier 3

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
112-24-3	Triethylenetetramine	0	0	0	0	0	1,100
-	Hydrogen fluoride and its water-soluble salts	40	0	0	0	1,000	2

< Display >

supplier 1

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
None to be reported							

< motor >

supplier 1

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
-	Fluorides (as total F)	224	0	0	0	0	0
100-41-4	Ethylbenzene	1,871	0	0	0	0	0
108-95-2	Phenols	288	0	0	0	0	0
108-88-3	Toluene	5	0	0	0	0	0
1330-20-7	Xylene	1,526	0	0	0	0	0

supplier 2

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
None to be reported							

supplier 3

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTW s	Waste
* 115-10-6	Dimethylether	0	0	0	0	0	1,130
108-88-3	Toluene						
* 123-92-2	Isoamyl acetate						
* 67-63-0	Isopropyl alcohol						
1330-20-7	Xylene						
100-41-4	Ethylbenzene						
* 1185-55-3	Methyltrimethoxysilane	0	0	0	0	0	50
* 123-86-4	Butyl acetate						
* 108-87-2	Methylcyclohexane						
* 461-58-5	Dicyandiamide						
109-86-4	Ethylene glycol monomethyl ether						
* 25068-38-6	Bisphenol A type Solid epoxy resin						
109-86-4	Ethylene glycol monomethyl ether	0	0	0	0	0	960
* 8042-87	Mineral oil						
* 110-82-7	Cyclohexane						
* 74-98-6	Propane						
1717-00-6	Dichlorofluoroethane						
* 63148-57-2	Polysiloxane						
* 68476-85-7	Liquidified Petroleum Gas	0	0	0	0	0	653,400
* 115-10-6	Dimethyl Ether						
* 100-51-6	Benzyl Alcohol						
* 104-76-7	2-ethyl-1-hexanol						
* 108-94-1	Cyclohexanone						
* 123-92-2	Isopentyl Acetate						
* 34590-94-8	Dipropylene glycol monomethyl ether	0	0	0	0	0	5,832
* 27858-32-8	Diisopropoxy di(ethoxyacetoacetyl) titanate						
* 12122-17-7	Basic zinc carbonate						
* 681-84-5	Tetramethoxysilane						
* 9003-36-5	Formaldehyde, polymer with (chloromethyl)oxirane and phenol						
* 1333-86-4	Carbon black						
* 7440-31-5	Tin	0	0	0	0	0	4,302
* 7440-50-8	Copper						
* 7440-22-4	Silver						
* 67-64-1	Acetone						
* 78-93-3	Methyl Ethyl Ketone						
108-88-3	Toluene						
* 111-76-2	Ethylene glycol monobutyl ether	0	0	0	0	0	27
* 108-65-6	Propylene glycol monomethyl ether acetate						
* 78-93-3	Methyl Ethyl Ketone						
* 108-10-1	Methyl Isobutyl ketone						

*not listed in the Japanese PRTR.

2018 List of PRTR chemical substances

< Integrated circuit/semiconductor >

POTW s :publically (publicly) owned treatment works

supplier 1

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Em ission	W ater Bodies	Land	On-site Landfills	POTW s	W aste
-	Antim ony and its com pounds	0	0	0	0	0	8,100
7705-08-0	Ferric chloride	0	0	0	0	0	0
-	Silver and its water-soluble com pounds	0	0	0	0	0	0
127-19-5	N,N-dim ethylacetam ide	0	0	0	0	0	0
91-20-3	Naphthalene	0	0	0	0	0	0
7439-92-1	Lead	0	0	0	0	0	620
7440-02-0	Nickel	0	0	0	0	0	0
-	Hydrogen fluoride and its water-soluble salts	120	0	0	0	0	0
1321-94-4	M ethynaphthalene	0	0	0	0	0	0

supplier 2

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Em ission	W ater Bodies	Land	On-site Landfills	POTW s	W aste
100-41-4	Ethylbenzene	1,300	0	0	0	0	0
7705-08-0	Ferric chloride	0	0	0	0	0	0
1330-20-7	Xylene	1,500	0	0	0	0	0
127-19-5	N,N-dim ethylacetam ide	0	0	0	0	0	0
95-63-6	1,2,4-trim ethylbenzene	23	0	0	0	0	0
-	Lead com pounds	0	0	0	0	0	34
7440-02-0	Nickel	0	0	0	0	0	0
110-85-0	Piperazine	0	1,100	0	0	0	0
-	Hydrogen fluoride and its water-soluble salts	700	0	0	0	0	0

supplier 3

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Em ission	W ater Bodies	Land	On-site Landfills	POTW s	W aste
112-24-3	Triethylenetetram ine	0	0	0	0	0	1,100
-	Hydrogen fluoride and its water-soluble salts	42	0	0	0	1,200	1

< Display >

supplier 1

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Em ission	W ater Bodies	Land	On-site Landfills	POTW s	W aste
None to be reported							

< motor >

supplier 1

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Em ission	W ater Bodies	Land	On-site Landfills	POTW s	W aste
-	Fluorides (as total F)	594	0	0	0	0	0
100-41-4	Ethylbenzene	3,204	0	0	0	0	0
108-95-2	Phenols	468	0	0	0	0	0
108-88-3	Toluene	4	0	0	0	0	0
1330-20-7	Xylene	2,606	0	0	0	0	0

supplier 2

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Em ission	W ater Bodies	Land	On-site Landfills	POTW s	W aste
None to be reported							

supplier 3

substances specified by Japanese PRTR		Releases (kg/year)				Transfers (kg/year)	
CAS No.	Name	Air Emission	Water Bodies	Land	On-site Landfills	POTWs	Waste
* 115-10-6	Dimethylether	None	None	None	None	None	1130.4
108-88-3	Toluene						
* 123-92-2	Isoamyl acetate						
* 67-63-0	Isopropyl alcohol						
1330-20-7	Xylene						
100-41-4	Ethylbenzene						
* 1185-55-3	Methyltrimethoxysilane	None	None	None	None	None	516
* 100-41-4	Ethylbenzene						
* 123-86-4	Butyl acetate						
* 1330-20-7	Xylene	None	None	None	None	None	50.4
* 106-97-8	Butane						
* 115-10-6	Dimethylether						
* 123-86-4	Butyl acetate						
* 7498-6	Propane						
* 78-93-3	Methyl Ethyl Ketone						
* -	Aminosilane	None	None	None	None	None	122.4
* -	Epoxy silane						
* 1333-86-4	Carbon Black						
* 67-63-0	Isopropanol						
* 60164-51-4	Perfluoroalkylether	None	None	None	None	None	1071.6
* 21645-51-2	Aluminum hydroxide	None	None	None	None	None	12
* 2045294-94-6	Trimethylated and dimethylated silic	None	None	None	None	None	463.32
* 27858-32-8	Diisopropoxy di(ethoxyacetoacetyl) titanate						
* 13463-67-7	Titanium dioxide						
* 1333-86-4	Carbon black						
* -	Crystalline silica						
* -	Crystalline free silica						
* -	Alkoxysilane	None	None	None	None	None	3.96
* 13463-67-7	Titanium oxide						
* -	Organosilane						
* -	Alkoxysilane						
* 1333-86-4	Carbon black						
* 111-90-0	Diethylene glycol monoethylether						
141-43-5	2-aminoethanol	None	None	None	None	None	480
* -	Surfactant	None	None	None	None	None	480
* 107-83-5	2-Methylpentane						
* 96-14-0	3-Methylpentane						
* 106-97-8	Butane						
* 7498-6	Propane						
* 67-64-1	Acetone						
* 64-17-5	Ethyl alcohol						
110-54-3	Hexane						
* 75-83-2	2,3-Dimethylbutane						
* 96-37-7	Methylcyclopentane						
* 64741-97-5	Base Oil	None	None	None	None	None	3.84
* -	Thickener						
* -	Additive barium compound						
* 25068-38-6	Poly(Bisphenol A-co-epichlorohydrin)	None	None	None	None	None	273
* 9003-36-5	Bisphenol F Epoxy Resin						
* 12070-12-1	Tungsten Carbide						
* 1309-37-1	Ferric Oxide						
* -	Others						
* -	Poly(amideamine)	None	None	None	None	None	273
* 12070-12-1	Metall Carbide						
* 1309-37-1	Iron Oxide						
* -	Others	None	None	None	None	None	60
* 7085-85-0	Ethyl 2-cyanoacrylate						
85-44-9	Phthalic anhydride						
123-31-9	Hydroquinone						
* 25068-38-6	Bisphenol A Type Liquid Epoxy Resin	None	None	None	None	None	12
84-74-2	Di-n-butylphthalate						
* -	Silica						
* -	Polyamideamine	None	None	None	None	None	4.8
* -	Silica						

* 25068-38-6	Bisphenol A Type Liquid Epoxy Resin						
* 9003-36-5	Bisphenol F Type Liquid Epoxy Resin						
* -	Silica	None	None	None	None	None	168
* 2425-79-8	1,4-Butanedioldiglycidylether						
* -	Polyamideamine						
* 80-05-7	Bisphenol A						
* 111-40-0	Diethylenetriamine	None	None	None	None	None	163.2
* 112-24-3	Triethylene tetramine						
* 109-55-7	Dimethylaminopropylamine						
* 868-77-9	2-Hydroxyethyl methacrylate						
* 107-07-3	Ethylene chlorohydrin						
* 98-82-8	Cumene	None	None	None	None	None	1.5
* -	Silica						
* -	Methacrylic ester						
* 64-17-5	Ethyl alcohol						
* 71-23-8	n-Propanol						
* 67-56-1	Methyl alcohol	None	None	None	None	None	3
* -	Hardening accelerator						
* 2495-37-6	Aromatic methacrylate ester						
* 79-41-4	Methacrylic acid						
* 3006-93-7	Maleimide resin	None	None	None	None	None	18
* 614-45-9	Tert-butylperbenzoate						
* 112945-52-5	Silica, amorphous, fumed, crystal-free						
* 1189-08-8	1,3-Butylene glycol dimethacrylate						
* 142-82-5	n-Heptane						
* 34562-31-7	Diethyl-phenylpropyl-dihydropyridine	None	None	None	None	None	48
* 67-63-0	Propan-2-ol						
* 645-62-5	2-Ethylhex-2-enal						
* 25068-38-6	bisphenol A Epichlorohydrin polymer	None	None	None	None	None	30
* 9003-36-5	Bisphenol F Epichlorohydrin polymer						
* -	Polyamideamine	None	None	None	None	None	30
* 112-57-2	Tetraethylenepentamine						
* -	Interchangeable low viscosity base oil	None	None	None	None	None	18
* 25037-66-5	Unsaturated polyester resin						
* 100-42-5	Styrene	None	None	None	None	None	1152
* -	Organic peroxide	None	None	None	None	None	5.76
* 67-64-1	Acetone						
* 99-97-8	N,N-Dimethyl-p-toluidine	None	None	None	None	None	75.84
* -	Polyamide resin	None	None	None	None	None	388.8
* 24980-58-3	Silyl-terminated Resin						
* -	Organic tin compound						
* 78-42-2	Tris(2-Ethylhexyl)phosphate	None	None	None	None	None	619.2
* 1333-86-4	Carbon Black						
* 67-56-1	Methanol						
* 25068-38-6	Bisphenol A Type Liquid Epoxy Resin						
* 1309-64-4	Antimony Trioxide	None	None	None	None	None	9840
* -	Silica						
* 9003-36-5	Formaldehyde, polymer with (chloromethyl)oxirane and phenol	None	None	None	None	None	25920
* 1333-86-4	Carbon black						
* 6864-37-5	4,4'-methylenebis(2-methylcyclohexanamine)	None	None	None	None	None	5712
* 14808-60-7	Crystalline Silica						
* 52301-18-5	Akenoxysilane						
* 69709-01-9	Organosilane	None	None	None	None	None	2.4
* 1760-24-3	Alkoxysilane						
* 13463-67-7	Titanium oxide						
* 104-76-7	2-ethylhexyl alcohol						
* 25068-38-6	Bisphenol A Epoxy resin	None	None	None	None	None	240
* 11070-44-3	Tetrahydrophthalic anhydride	None	None	None	None	None	192
* -	Promoter						
* 7085-85-0	Ethyl 2-cyanoacrylate						
* 85-44-9	Methyl methacrylate	None	None	None	None	None	66
* 123-31-9	Hydroquinone						
* -	Thickener, Additive						
* 7085-85-0	Ethyl 2-cyanoacrylate						
* 85-44-9	Phthalic anhydride	None	None	None	None	None	282
* 123-31-9	Hydroquinone						

* -	Ester	None	None	None	None	None	6264
* 34590-94-8	Dipropylene glycol dimethyl ether						
* 7085-85-0	Ethyl 2-cyanoacrylate	None	None	None	None	None	11.4
* -	Ethylene Copolymer Rubber						
* 67762-90-7	Treated fumed silica						
* 1333-86-4	Carbon black						
123-31-9	Hydroquinone	None	None	None	None	None	11.4
* 46729-07-1	Methacrylate Resin						
* 1189-08-8	1,3-Butylene glycol dimethacrylate						
* 27813-02-1	Hydroxyalkyl methacrylate						
* 39382-25-7	Bisphenol A fumarate resin						
* -	Polyurethane methacrylate resin						
* -	Polyurethane methacrylate resin						
* 79-10-7	Acrylic acid						
9036-19-5	Octylphenol ethoxylate, 9-10EO						
* 114-83-0	1-Acetyl-2-phenylhydrazine						
98-82-8	Cumene						

*not listed in the Japanese PRTR.