

Plant Discharge Data



Air Pollution Data:
The following units are used: P.M., g/Nm³; NOx, ppm; SOx, K value, hydrogen chloride, mg/Nm³.
The most stringent value prescribed by laws, ordinances, or conventions is rendered as the specified value.
The measurement indicates the maximum value.
If a multiple number of the same type of equipment is used, the equipment given is the one to which the most stringent specified value is applied.

Water Pollution Data:
The following units are used: mg/l. (except pH); and count/cm³ for Coliform bacteria only.
pH: hydrogen ion concentration; BOD: biochemical oxygen demand; COD: chemical oxygen demand; SS: suspended solids.
The most stringent value prescribed by laws, ordinances, or conventions is rendered as the specified value.
ND indicates a value that is below the minimum detection limit.

Kariya Region (Kariya Plant · Trial Manufacturing Plant · R&D center)

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	180	150	110
	Boiler	0.2	0.2	0.005
P.M.	Boiler	0.2	0.2	0.002
	Gas carburizing furnace	1.75	1.75	0.11
SOx	Boiler	1.75	1.75	0.11
	Gas carburizing furnace	3.5	1.75	0.007

Water Pollution Data

Item	Regulated value	Aisin environmental standard	Measured value	
			Maximum	Average
PH	5.8 ~ 8.6	5.8 ~ 8.6	7.3	6.7
BOD	25	20	4.6	2.1
COD	25	20	5.4	3.7
SS	30	20	11	2.3
Oil	5	3	0.6	0.1
Total nitrogen	15	15	6.3	3.8
Total phosphorus	2	2	0.11	0.1
Coliform bacteria	3,000	1,000	32	3.2
Soluble iron	5	2	ND	ND
Soluble manganese	5	2	ND	—
Zinc	5	2	0.2	0.072
Copper	1	0.5	ND	—
Chromium	2	0.4	0.03	0.03
Phenols	5	1	ND	—
Fluorine	8	2	ND	—
Cadmium	0.1	ND	ND	—
Cyanide	1	ND	ND	—
Lead	0.08	ND	ND	—
Chromium(VI)	0.5	ND	ND	—

PRTR-Target Substances

Substance name	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
Zinc compounds (water-soluble)	827	0	0	0	248	0	579
Xylene	230	230	0	0	0	0	0
Organic tin compounds	112	0	0	0	0	0	112
Toluene	491	491	0	0	0	0	0
Nickel compounds	206	0	0	0	144	0	62
Manganese and its compounds	206	0	0	0	72	0	134
Total	2,072	721	0	0	464	0	887

Unit: kg / year
Does not include compounds of which Aisin handles less than 100kg / year

Anjo Plant

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	—	230	34
P.M.	Boiler	0.3	0.3	0.002
SOx	Boiler	5.3	5.0	0.005

PRTR-Target Substances

Substance name	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
Ethylene glycol	55,805	0	0	0	0	0	55,805
Xylene	805	757	0	0	48	0	0
Chlorodifluoromethane (HCFC-22)	129,188	1,482	0	0	0	502	127,204
Toluene	1,190	1,154	0	0	36	0	0
Total	186,988	3,393	0	0	84	502	183,009

Unit: kg / year
Does not include compounds of which Aisin handles less than 100kg / year

Water Pollution Data

Item	Regulated value	Aisin environmental standard	Measured value	
			Maximum	Average
PH	6.5 ~ 8.5	6.5 ~ 8.5	7.5	7.1
BOD	20	15	5.5	1.1
COD	25	20	9.2	3.8
SS	20	20	3.4	1.2
Oil	4	3	0.4	0.2
Total nitrogen	40	40	9.6	2.1
Total phosphorus	3	3	0.12	0.10
Coliform bacteria	1,000	1,000	7	0.6
Soluble iron	2	2	0.3	0.3
Soluble manganese	2	2	0.2	—
Zinc	2	2	0.23	0.08
Copper	0.2	0.2	0.06	—
Chromium	0.2	0.2	ND	ND
Phenols	0.2	0.2	ND	—
Fluorine	2	2	ND	—
Cadmium	ND	ND	ND	—
Cyanide	ND	ND	ND	—
Lead	0.1	ND	ND	—
Chromium(VI)	0.05	ND	ND	—

Handa Region (Handa Plant · Handa Electronic Plant)

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	150	150	57
	Generator	200	200	180
P.M.	Boiler	0.10	0.10	0.002
	Generator	0.05	0.05	0.004
SOx	Boiler	1.75	1.75	0.008
	Generator	1.75	1.75	0.04

Water Pollution Data

Item	Regulated value	Aisin environmental standard	Measured value	
			Maximum	Average
PH	6.0 ~ 8.0	6.0 ~ 8.0	6.9	6.7
BOD	15	10	2.3	0.8
COD	15	10	8	3.3
SS	15	10	1.7	0.5
Oil	2	2	0.6	0.1
Total nitrogen	15	15	5.4	3.3
Total phosphorus	2	2	0.06	0.1
Coliform bacteria	3,000	1,000	48	4.2
Soluble iron	0.5	0.5	ND	ND
Soluble manganese	0.5	0.5	ND	ND
Zinc	5	2	0.37	0.17
Copper	1	0.5	ND	—
Chromium	2	0.4	ND	ND
Phenols	0.5	0.5	ND	—
Fluorine	8	2	ND	—
Cadmium	0.1	ND	ND	—
Cyanide	1	ND	ND	—
Lead	0.1	ND	ND	—
Chromium(VI)	0.5	ND	ND	—

PRTR-Target Substances

Substance name	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
2-Aminoethanol	4,390	0	0	0	0	4,390	0
Xylene	12,468	10,473	0	0	1,995	0	0
Toluene	4,036	2,906	0	0	1,130	0	0
Total	20,894	13,379	0	0	3,125	4,390	0

Unit: kg / year
Does not include compounds of which Aisin handles less than 100kg / year

Shinkawa Plant

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	260	180	120
P.M.		0.30	0.20	0.002
SOx		1.75	1.75	0.16

PRTR-Target Substances

Item	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
Xylene	114	114	0	0	0	0	0
Toluene	544	544	0	0	0	0	0
Total	658	658	0	0	0	0	0

Unit: kg / year
Does not include compounds of which Aisin handles less than 100kg / year

Water Pollution Data

Item	Regulated value	Aisin environmental standard	Measured value	
			Maximum	Average
PH	5.8 ~ 8.6	5.8 ~ 8.6	7.8	7.2
BOD	25	20	6.8	1.5
COD	25	20	11	6.3
SS	30	20	6.6	0.9
Oil	5	3	0.3	0.1
Total nitrogen	40	40	22	8.2
Total phosphorus	3	3	0.22	0.1
Coliform bacteria	3,000	1,000	0	0
Soluble iron	5	2	ND	ND
Soluble manganese	5	2	0.3	0.3
Zinc	5	2	0.70	0.2
Copper	1	0.5	0.05	0.05
Chromium	2	0.4	ND	—
Phenols	5	1	ND	—
Fluorine	8	2	ND	—
Cadmium	0.1	ND	ND	—
Cyanide	1	ND	ND	—
Lead	0.1	ND	ND	—
Chromium(VI)	0.5	ND	ND	—



Shintoyo Plant

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	180	150	68
	Gas carburizing furnace	0.1	0.1	0.003
P.M.	Boiler	0.2	0.2	0.002
	Gas carburizing furnace	9.0	9.0	0.24
SOx	Boiler	9.0	9.0	0.005
	Gas carburizing furnace	9.0	9.0	0.005

* Wastewater processing at the Shintoyo Plant is tendered to another group company occupying the same site. As a result there is no individual data for the Shintoyo Plant.

PRTR-Target Substances

Item	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
Xylene	521	521	0	0	0	0	0
Styrene	124,273	3,728	0	0	0	0	120,545
Bis(2-ethylhexyl) phthalate	2,533	0	0	0	203	0	2,330
Hydrogen fluoride / other water soluble salts	2,194	439	66	0	1,689	0	0
Total	129,521	4,688	66	0	1,892	0	122,875

Unit: kg/ year
Does not include compounds of which Aisin handles less than 100kg/ year

Ogawa Plant

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	150	140	67
	Heating furnace	180	140	91
	Generator	70	35	30
P.M.	Boiler	0.10	0.10	0.003
	Heating furnace	0.20	0.20	0.002
	Generator	0.05	0.05	0.002
SOx	Boiler	3.0	3.0	0.008
	Heating furnace	3.0	3.0	0.02
	Generator	3.0	3.0	0.20

PRTR-Target Substances

Substance name	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
Zinc compounds (water-soluble)	561	0	45	0	123	0	393
Xylene	1,536	1,536	0	0	0	0	0
Toluene	364	364	0	0	0	0	0
Nickel compounds	1,207	12	10	0	618	0	567
Boron and its compounds	310	0	155	155	0	0	0
Total	3,978	1,912	210	155	741	0	960

Unit: kg/ year
Does not include compounds of which Aisin handles less than 100kg/ year

Water Pollution Data

Item	Regulated value	Aisin environmental standard	Measured value	
			Maximum	Average
PH	6.5 ~ 8.5	6.5 ~ 8.5	7.3	7.1
BOD	10	10	7.3	2.8
COD	160	10	8.5	4.3
SS	10	10	2.4	0.7
Oil	2	2	0.4	0.1
Total nitrogen	40	40	16	11
Total phosphorus	3	3	0.3	0.1
Coliform bacteria	300	300	55	5.9
Soluble iron	2	2	ND	ND
Soluble manganese	2	2	0.2	0.2
Zinc	2	2	0.38	0.18
Copper	0.2	0.2	ND	ND
Chromium	0.2	0.2	ND	—
Phenols	0.2	0.2	ND	—
Fluorine	2	2	ND	—
Cadmium	ND	ND	ND	—
Cyanide	ND	ND	ND	—
Lead	0.1	ND	ND	—
Chromium(VI)	0.05	ND	ND	—

Nishio Region (Nishio Plant · Nishio Body Component Plant · Machinery & Equipment Plant)

Air Pollution Data

Item	Equipment	Regulated value	Aisin environmental standard	Measured value
NOx	Boiler	230	150	138
	Aluminum melting furnace	180	150	120
	Heat-treatment furnace	180	150	60
	Waste-material incinerator	250	250	140
	Generating facility	100	100	26
P.M.	Boiler	0.20	0.20	0.002
	Aluminum melting furnace	0.20	0.20	0.09
	Heat-treatment furnace	0.20	0.20	0.002
	Waste-material incinerator	0.25	0.25	0.21
	Generating facility	0.05	0.05	0.002
SOx	All facilities	3	3	0.74
Hydrogen chloride	Waste-material incinerator	700	500	89

Water Pollution Data

Item	Regulated value	Aisin environmental standard	Measured value	
			Maximum	Average
PH	5.8 ~ 8.6	5.8 ~ 8.6	7.6	6.8
BOD	10	10	4.6	1.5
COD	10	10	6.7	3.7
SS	10	10	1.9	0.8
Oil	5	2	0.4	0.2
Total nitrogen	15	15	1.8	1.4
Total phosphorus	2	2	0.16	0.1
Coliform bacteria	300	300	46	7.8
Soluble iron	3	2	ND	ND
Soluble manganese	3	2	ND	ND
Zinc	1	1	0.7	0.2
Copper	0.5	0.5	0.06	0.06
Chromium	0.1	0.1	ND	ND
Phenols	0.5	0.5	ND	—
Fluorine	2	2	ND	—
Cadmium	0.1	ND	ND	—
Cyanide	ND	ND	ND	—
Lead	0.1	ND	ND	—
Chromium(VI)	0.05	ND	ND	—

PRTR-Target Substances

Substance name	Volume handled	Volume released		Transfer volume	Volume recycled	Volume removed	Volume attached to product
		Air	Water				
2-Aminoethanol	4,404	0	0	0	0	4,404	0
Ethyl benzene	31,560	28,040	0	0	3,520	0	0
Xylene	40,966	27,766	0	0	13,200	0	0
Chromium(VI) compounds	2,070	0	8	0	0	841	1,221
Inorganic cyanide compounds	1,168	0	0	0	0	1,168	0
Styrene	19,679	590	0	0	0	0	19,089
Copper salts (water-soluble, except complex salts)	4,705	0	5	0	465	0	4,235
1-3-5 Trimethyl benzene	6,137	5,830	0	0	307	0	0
Toluene	35,366	27,209	0	0	8,157	0	0
Nickel compounds	16,260	0	1	0	1,625	0	14,634
Hydrazine	862	0	0	0	0	862	0
Bis (2-ethylhexyl) phthalate	21,886	0	0	0	438	0	21,448
Boron and its compounds	162	0	81	0	0	81	0
Poly(oxytyrene)-alkyl-ether (C=12-15)	508	508	0	0	0	0	0
Formaldehyde	273	55	0	0	0	218	0
Metacryl methyl oxide	109,898	0	0	0	0	49,454	60,444
Dioxins	132.6	132	0	0.6	0	0	0
Total	295,904	89,998	95	0	27,712	57,028	121,071

Unit: kg/ year (Dioxins: mg-TEQ/ year)
Does not include compounds of which Aisin handles less than 100kg/ year