

**Release and transfer volume of substances covered by PRTR law from Kuraray plants,
research laboratories and domestic affiliated companies in FY 2010**

1. This table shows the substance used more than one ton in each plant. (Specified Class 1 designated chemical substances are more than 0.5 ton).
2. Unit; metric ton (excepting dioxins; mg-TEQ for dioxins)
3. In this table, the values include affiliated companies in the plant.
Each company submits the official notice; therefore some figures in this table may not be same with the officially notified figures.
4. The official notice is two significant figure. (Unit; kg)

1. Kuraray Co., Ltd.

Okayama Plant (including Kuraray Engineering Co., Ltd., Kuraray Kuraflex Co., Ltd., Kuraray Okayama Spinning Co., Ltd., Kuraray Techno Co., Ltd.)
1-2-1, Kaigan-dori, Minami-ku, Okayama 702-8601, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
75-07-0	acetaldehyde	0.556			0.556				
141-43-5	2-aminoethanol								
—	antimony and its compounds								
60-00-4	ethylenediaminetetraacetic acid								
75-56-9	1,2-epoxypropane								
7705-08-0	ferric chloride								
108-05-4	vinyl acetate	62.971			62.971	0.453			0.453
124-40-3	dimethylamine	3.760			3.760				
68-12-2	N,N-dimethylformamide	93.705	1.937		95.642	107.937			107.937
121-44-8	triethylamine								
108-88-3	toluene	107.525	0.021		107.546	3.222			3.222
123-31-9	hydroquinone								
822-06-0	hexamethylene diisocyanate								
—	boron and its compounds		42.591		42.591				
—	poly(oxyethylene) alkyl ether					0.004			0.004
50-00-0	formaldehyde	0.710			0.710	0.008			0.008
101-77-9	4,4'-methylenedianiline								
101-68-8	methylenebis(4,1-phenylene) diisocyanate					7.650			7.650
—	dioxins	0.049	9.370		9.419	0.001			0.001

Kurashiki Plant (Tamashima) (including Kuraray Tamashima Co., Ltd., Kuraray Medical Inc., Ltd., Kuraray Techno Co., Ltd.)

7471, Tamashimaotoshima, Kurashiki, Okayama 713-8550, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
108-05-4	vinyl acetate	0.035			0.035	0.779			0.779
127-19-5	N,N-dimethylacetamide								
68-12-2	N,N-dimethylformamide								
100-21-0	terephthalic acid					0.044			0.044
—	poly(oxyethylene) alkyl ether								
—	dioxins	6.445	0.113		6.558	0.000			0.000

Kurashiki Plant (Sakazu area) (including Kuraray Medical Inc., Kuraray Techno Co., Ltd.)

1621, Sakazu, Kurashiki, Okayama 710-8622, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
67-66-3	chloroform	0.375			0.375	4.093			4.093
108-88-3	toluene	0.653			0.653	8.460			8.460
110-54-3	n-hexane	1.703			1.703	5.535			5.535

* There is no dioxins.

Saijo Plant (including Kuraray Saijo Co., Ltd, Kuraray Techno Co., Ltd., Kuraray Kikoh Co., Ltd.)

892, Tsuitachi, Saijo, Ehime 793-8585, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
75-07-0	acetaldehyde	0.493			0.493				
—	antimony and its compounds								
7705-08-0	ferric chloride						0.020		0.020
123-91-1	1,4-dioxane		3.185		3.185	0.126			0.126
100-21-0	terephthalic acid								
108-95-2	phenol	0.042	0.137		0.179	2.963			2.963
50-00-0	formaldehyde					0.015			0.015

* There is no dioxins.

Niigata Plant (including Kyosei Chemical Co., Ltd., Kuraray Techno Co., Ltd.)

2-28, Kurashiki-cho, Tainai, Niigata 959-2691, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
141-32-2	n-butyl acrylate	0.232			0.232				
96-33-3	methyl acrylate	0.581			0.581		0.100		0.100
75-07-0	acetaldehyde	0.352			0.352				
75-86-5	acetone cyanohydrin								
78-67-1	2,2'-azodiisobutyronitrile								
107-18-6	allyl alcohol	0.016			0.016				
149-57-5	2-ethylhexanoic acid					4.612			4.612
100-41-4	ethyl benzene	2.156			2.156				
—	xylene	3.233			3.233				
108-05-4	vinyl acetate	4.435			4.435		5.409		5.409
—	inorganic cyanide compounds	0.733	0.091		0.824	0.501	0.002		0.503
56-23-5	tetrachloromethane	0.021			0.021				
75-09-2	dichloromethane					0.200			0.200
77-73-6	dicyclopentadiene								
100-42-5	styrene	0.049			0.049	1.976			1.976
505-32-8	3,7,11,15-tetramethylhexadeca-1-en-3-ol	0.042	0.000		0.043				
121-44-8	triethylamine					0.569			0.569
108-88-3	toluene	0.256			0.256	6.491	47.700		54.191
—	lead and its compounds					8.339			8.339
—	nickel compounds								
117-81-7	bis(2-ethylhexyl) phthalate								
110-54-3	n-hexane	0.471			0.471	5.446			5.446
—	manganese and its compounds		1.200		1.200				
108-31-6	maleic anhydride								
79-41-4	methacrylic acid	0.033			0.033	4.091			4.091
80-62-6	methyl methacrylate	50.614	0.757		51.371	4.170	1.500		5.670
—	dioxins	0.020	0.000		0.020			0.003	0.003

Kashima Plant (including Kuraray Techno Co., Ltd.)

36, Towada, Kamisu, Ibaraki 314-0197, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
—	zinc compounds (water-soluble)		0.625		0.625			0.373	0.373
141-32-2	n-butyl acrylate	0.075			0.075				
78-79-5	isoprene	4.293			4.293			1.260	1.260
149-57-5	2-ethylhexanoic acid							34.864	34.864
100-41-4	ethylbenzene	0.279			0.279				
75-21-8	ethylene oxide								
111-87-5	1-octanol	0.077			0.077				
98-82-8	cumene	3.553			3.553			0.041	0.041
128-37-0	2,6-di-tert-butyl-4-methylphenol								
100-42-5	styrene	0.286			0.286	2.603			2.603
100-21-0	terephthalic acid					28.268			28.268
121-44-8	triethylamine								
108-88-3	toluene	12.129			12.129	664.015		0.889	664.904
—	nickel compounds						0.830	2.120	2.950
106-99-0	1,3-butadiene	1.640			1.640				
110-00-9	furan	0.041			0.041			0.041	0.041
110-54-3	n-hexane	16.423			16.423	0.183		0.124	0.307
—	poly(oxyethylene) alkyl ether							18.729	18.729
50-00-0	formaldehyde	0.071			0.071			25.769	25.769
108-31-6	maleic anhydride							0.144	0.144
80-62-6	methyl methacrylate	0.297			0.297				
98-83-9	α-methylstyrene								
101-68-8	methylenebis(4,1-phenylene) diisocyanate								
—	molybdenum and its compounds							0.043	0.043
—	dioxins	0.336			0.336	0.023		0.029	0.052

Tsukuba Research Laboratories

41, Miyukigaoka, Tsukuba, Ibaraki 305-0841, Japan

* There is no substances covered by PRTR law.

* There is no dioxins.

2. Domestic Affiliated Companies

Tsurumi Plant, Kuraray Chemical Co., Ltd. (including KC Processing Co., Ltd.)

4342, Tsurumi, Bizen, Okayama 705-0025, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
108-88-3	toluene	5.919			5.919				

* There is no dioxins.

Ibuki Plant, Kuraray Plastics Co., Ltd. (including Ibuki Kosan Co., Ltd.)

4330, Osa, Tarui-cho, Fuwa-gun, Gifu 503-2122, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
117-81-7	bis(2-ethylhexyl) phthalate					2.123			2.123

* There is no dioxins.

Maruoka Plant, Kuraray Fastening Co., Ltd.

56, Noune, Maruoka-cho, Sakai, Fukui 910-0273, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
108-88-3	toluene	1.783			1.783	0.907			0.907

* There is no dioxins.

Okayama Plant, Kuraray Trading Co., Ltd

1099, Kawabe, Mabi-cho, Kurashiki, Okayama 710-1313, Japan

* There is no substances covered by PRTR law.

* There is no dioxins.