

**Release and transfer volume of substances covered by PRTR law from Kuraray plants,
research laboratories and domestic affiliated companies in FY 2009**

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)

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	0.609			0.609				
—	antimony and its compounds								
107-21-1	ethylene glycol					0.002			0.002
60-00-4	ethylenediaminetetraacetic acid								
75-56-9	1,2-epoxypropane								
108-05-4	vinyl acetate	57.696			57.696	0.572			0.572
68-12-2	N,N-dimethylformamide	84.466	2.052		86.518	94.897			94.897
108-88-3	toluene	102.139	0.020		102.158	3.207			3.207
123-31-9	hydroquinone								
822-06-0	hexamethylene diisocyanate								
—	boron and its compounds		42.600		42.600	0.011			0.011
—	poly(oxyethylene) alkyl ether (alkyl C=12-15)					0.006			0.006
50-00-00	formaldehyde	0.734			0.734	0.008			0.008
101-77-9	4,4'-methylenedianiline								
—	dioxins	0.463	0.001		0.463	0.001			0.001

Kurashiki Plant (excluding Sakazu area) (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
—	zinc compounds (water-soluble)		0.010		0.010	0.840			0.840
—	bisphenol A epoxy resin					0.664			0.664
107-21-1	ethylene glycol		0.252		0.252	3.131			3.131
108-05-4	vinyl acetate	0.023			0.023	0.817			0.817
68-12-2	N,N-dimethylformamide								
100-21-0	terephthalic acid								
—	poly(oxyethylene) alkyl ether (alkyl C=12-1								
—	dioxins	17.991	0.135		18.125				

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	0.234			0.234	2.305			2.305
68-12-2	N,N-dimethylformamide		0.030		0.030	0.340			0.340
108-88-3	toluene	0.501			0.501	6.069			6.069

* 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
96-33-3	methyl acrylate	0.481			0.481				
75-07-0	acetaldehyde	0.352			0.352				
78-67-1	2,2'-Azodiisobutyronitrile								
100-41-4	ethyl benzene	1.161			1.161				
107-21-1	ethylene glycol	0.002	0.031		0.033				
1330-20-7	xylene	1.743			1.743				
79-11-8	chloroacetic acid								
108-05-4	vinyl acetate	4.093			4.093		3.143		3.143
—	inorganic cyanide compounds	0.801	0.100		0.901	0.547			0.547
56-23-5	tetrachloromethane	0.003			0.003		2.226		2.226
75-09-2	dichloromethane								
100-42-5	styrene	0.034			0.034	0.612			0.612
108-88-3	toluene	0.110			0.110		39.100		39.100
—	lead and its compounds					10.461			10.461
—	nickel compounds					1.170			1.170
—	barium and its water-soluble compounds								
117-81-7	bis(2-ethylhexyl) phthalate								
50-00-00	formaldehyde						3.064		3.064
—	manganese compouds		1.200		1.200				
108-31-6	maleic anhydride								
79-41-4	methacrylic acid	0.031			0.031				
80-62-6	methyl methacrylate	39.990	1.756		41.746	5.064	0.900		5.964
—	dioxins	0.732	0.311		1.043				

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)		0.707		0.707			0.406	0.406
78-79-5	isoprene	4.364			4.364			1.444	1.444
100-41-4	ethylbenzene	0.203			0.203				
100-42-5	styrene	0.268			0.268	2.697			2.697
100-21-0	terephthalic acid					18.710			18.710
108-88-3	toluene	10.749			10.749	212.375		0.889	213.264
—	nickel compounds					7.653	0.835	3.574	12.062
106-99-0	1,3-butadiene	1.051			1.051				
—	poly(oxyethylene) alkyl ether (alkyl C=12-1							10.139	10.139
50-00-0	formaldehyde	0.071			0.071			24.605	24.605
108-31-6	maleic anhydride							0.124	0.124
80-62-6	methyl methacrylate	0.295			0.295				
—	molybdenum and its compounds					0.055		0.048	0.103
98-83-9	α -methylstyrene								
—	dioxins	1.144			1.144			0.029	0.029

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	0.401			0.401				
—	antimony and its compounds								
107-21-1	ethylene glycol	0.851			0.851				
123-91-1	1,4-dioxane		3.201		3.201				
100-21-0	terephthalic acid								
108-95-2	phenol	0.026	0.076		0.102	1.024			1.024

* There is no dioxins.

Tsukuba Research Laboratories

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

* There is no substances covered by PRTR law.

* There is no dioxins.

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	0.003			0.003				

* 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
103-23-1	bis(2-ethylhexyl) adipate					0.336			0.336
108-88-3	toluene	0.872			0.872				
117-81-7	bis(2-ethylhexyl) phthalate					3.168			3.168

* There is no dioxins.

Hokkaido Plant, Kuraray Interior Co., Ltd.

194, Okayama, Mikasa, Hokkaido 068-2165, Japan

CAS No	substance	emissions volume				transport volume			
		atmosphere	water area	soil	total	waste	recycled	sewage works	total
108-88-3	toluene	1.000			1.000				

* 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	2.444			2.444	1.243			1.243

* 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.