

JSR Group ESG Data

Contents

Environment Data	P 1
Social Data	P 7
Governance Data	P 1 1
Policy / Guidelines / Philosophy	P 1 7
JSR Group Companies	P 3 5
Independent Review Report of JSR Group CSR Report 2019	P 3 8

Unless otherwise noted, FY (Fiscal Year) means the year starting April 1st. For example, FY2018 means April 1, 2018 - March 31, 2019

For both absolute values and percentages, numerical values that fall below the shown number of digits are rounded off. For this reason, the sums of individual numbers may differ from the sum values provided.



JSR Corporation

Created June, 2019

◆Environment Data

Environmental Impact of Business Activities

Category	Items	Boundary ※			Unit	FY2014	FY2015	FY2016	FY2017	FY2018			
		A	B	C									
Input Data	Raw materials consumption		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 kL	1,291	1,320	1,357	1,400	1,391		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		821	817	824	828	823		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		377	398	413	428	414		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		92	104	121	144	154		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		382	397	412	422	430		
	Energy consumption	(Crude oil equivalent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 kL	266	268	268	266	269		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		73	77	79	80	80		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		44	52	65	75	81		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.35	0.37	0.36	0.35	0.36		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.19	0.19	0.19	0.18	0.18		
	Water consumption	(Excluding seawater)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 m ³	19,712	19,548	19,604	19,788	21,234		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		14,875	14,600	14,447	14,259	15,275		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		3,965	3,956	3,762	3,832	3,691		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		872	992	1,396	1,697	2,268		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		19.5	20.0	19.6	19.0	20.5		
		Intensity		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	m ³ /ton	10.3	9.7	9.0	8.7	8.5	
				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		9.7	9.9	11.8	12.4	15.8	
				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		14,359	14,190	13,917	13,667	14,790	
				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		357	253	354	393	313	
<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	159		158	176	200	172		
Industrial water		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 m ³	4,249	4,159	4,193	4,250	4,481			
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		28.6	28.5	29.0	29.8	29.3			
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Effective use rate of recycled water	%						
Seawater consumption	(For cooling)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 m ³	57,395	54,725	55,413	55,011	64,296			
Output Data	Total generated		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 tons	1,239	1,240	1,275	1,330	1,322		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		765	731	738	752	746		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		385	409	418	440	432		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		90	100	118	137	144		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		78	83	79	72	72		
	Industrial waste generated		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 tons	59	58	55	49	50		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		15	20	19	18	16		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		4	4	5	5	7		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Comparison with FY2013	%	12.7	11.1	6.2	-5.5	-4.5
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Intensity	Tons/tons	0.077	0.079	0.075	0.065	0.067
	Waste generated	Recycled waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 tons	0.040	0.050	0.045	0.040	0.037		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.045	0.044	0.040	0.039	0.046		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		39	44	43	39	38		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		25	25	25	23	21		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		12	17	16	14	12		
		Intensity		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons/tons	2	2	2	2	5	
				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.032	0.034	0.033	0.031	0.028	
				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.032	0.042	0.037	0.032	0.028	
				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.022	0.021	0.020	0.016	0.037	
<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	Amount of final offsite-landfills		1,000 tons	1.0	0.8	1.1	0.9	0.9
Intensity		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons/tons	0	0	0	0	0			
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.2	0.2	0.2	0.2	0.3			
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.8	0.6	1.0	0.7	0.6			
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0	0	0	0	0			
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.0005	0.0005	0.0004	0.0004	0.0008			
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	0.0091	0.0063	0.0081	0.0053	0.0039						

*Boundaries A: JSR Corporation B: Group companies in Japan C: Group companies in other countries

Category	Items	Boundary ※			Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
		A	B	C							
O u t p u t D a t a	Greenhouse gas emissions	Scope1 + Scope2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 tons CO ₂	964	994	1,032	1,053	1,078
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		659	651	658	653	666
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		197	213	212	210	214
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		108	129	163	190	197
		Comparison with FY2013	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	%	2.0	0.8	1.8	1.1	3.1
		Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons/tons	0.86	0.89	0.89	0.87	0.89
	Waste water	Total amount of waste water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1,000 m ³	16,397	16,147	16,912	16,968	17,587
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		11,974	11,755	12,161	12,108	12,479
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		3,864	3,833	3,930	3,975	4,077
		Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	m ³ /ton	558	559	821	885	1,031
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		15.7	16.1	16.5	16.1	16.7
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		10.0	9.4	9.4	9.0	9.4
	Waste water	COD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	6.2	5.6	7.0	6.4	7.2
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		496	493	531	530	577
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		445	444	459	457	479
		Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	x10 ⁻⁵ tons/tons	51	50	72	74	98
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		581	607	622	607	642
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		134	121	172	167	227
		Total nitrogen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	146	164	155	173	142
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		124	148	139	156	128
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		22	17	16	18	14
		Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	x10 ⁻⁵ tons/tons	163	202	188	207	171
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		56	40	38	40	33
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		1	1	1	1	1
	Total phosphorus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	0.3	0.4	0.7	0.7	0.6	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.3	0.4	0.3	0.3	0.5	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.4	0.6	1.0	0.9	0.7	
Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	x10 ⁻⁵ tons/tons	0.8	1.0	0.6	0.7	1.1		
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		12	12	12	13	13		
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		5	4	5	5	4		
Atmospheric emissions	SO _x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	7	8	7	8	9	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		0.6	0.6	0.7	0.6	0.5	
	Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	x10 ⁻⁵ tons/tons	1.8	1.9	1.7	1.9	2.1	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		353	374	338	369	341	
	NO _x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	322	342	305	335	308	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		31	32	33	34	33	
	Intensity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	x10 ⁻⁵ tons/tons	42	47	41	45	41	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		8.2	7.9	8.0	7.8	7.7	
	VOC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	683	649	670	583	536	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tons/tons	0.9	0.9	0.9	0.8	0.7
PRTR (In Japan only)	Amount handled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	937,292	922,315	966,150	981,530	960,932	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		734,653	697,558	734,202	739,259	725,727	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		202,639	224,757	231,947	242,272	235,205	
	Atmospheric emissions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	164	186	163	168	134	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		105	107	108	119	95	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		59	79	55	50	39	
	Water supply discharge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	10	9	10	10	11	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		3	2	3	2	3	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		7	7	7	8	8	
	Transported waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tons	719	862	800	1,032	890	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		284	386	272	445	328	
		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		435	476	527	587	562	

*Boundaries A: JSR Corporation B: Group companies in Japan C: Group companies in other countries

Accounting for Greenhouse Gas Emissions Throughout the Supply Chain

Note: From FY 2018, other indirect emissions (Scope 3) category 1 has been changed to be calculated for all JSR Group.

Category	Boundary	FY2014 Emission		FY2015 Emission		FY2016 Emission		FY2017 Emission		FY2018 Emission	
		t-CO ₂	ratio (%)								
I. Direct emissions (Scope 1)	JSR Group	430,136	42.1	414,132	39.3	434,734	25.8	421,348	24.7	443,176	20.1
II. Energy-derived indirect emissions (Scope 2)		533,470	52.2	579,420	55.0	597,369	35.5	632,045	37.1	634,567	28.8
III. Other indirect emissions (Scope 3)		59,152	5.8	59,828	5.7	651,797	38.7	649,936	38.2	1,126,703	51.1
I. Direct emissions (Scope 1)	JSR Corporation	398,027	56.9	379,520	55.1	397,763	30.9	383,394	29.9	404,131	31.5
II. Energy-derived indirect emissions (Scope 2)		260,928	37.3	271,750	39.5	259,969	20.2	269,797	21.1	262,009	20.5
III. Other indirect emissions (Scope 3)		41,041	5.9	37,131	5.4	629,484	48.9	627,963	49.0	614,841	48.0
I. Direct emissions (Scope 1)	Group companies in Japan	26,304	12.5	28,086	12.2	30,247	13.2	30,884	13.6	29,951	5.1
II. Energy-derived indirect emissions (Scope 2)		170,459	81.1	185,142	80.2	181,281	79.4	179,553	79.3	184,183	31.5
III. Other indirect emissions (Scope 3)		13,464	6.4	17,661	7.6	16,830	7.4	15,876	7.0	371,470	63.4
I. Direct emissions (Scope 1)	Group companies in other countries	5,806	5.2	6,527	4.9	6,724	4.0	7,070	3.6	9,094	2.7
II. Energy-derived indirect emissions (Scope 2)		102,082	90.7	122,528	91.4	156,118	92.7	182,695	93.3	188,376	55.8
III. Other indirect emissions (Scope 3)		4,647	4.1	5,037	3.8	5,483	3.3	6,096	3.1	140,392	41.6

Other indirect emissions (Breakdown of Scope 3)

(1) JSR Corporation

Category	Boundary	FY2014 Emission		FY2015 Emission		FY2016 Emission		FY2017 Emission		FY2018 Emission	
		t-CO ₂	ratio (%)								
Category 1	Purchased goods and services	-	-	-	-	552,567	87.8	547,887	87.2	540,653	87.9
Category 2	Capital goods	-	-	-	-	37,553	6.0	40,628	6.5	35,907	5.8
Category 3	Fuel and energy related activities not included in Scope 1 or 2	10,273	25.0	6,551	17.6	6,713	1.1	6,788	1.1	6,958	1.1
Category 4	Transportation and delivery (upstream)	12,028	29.3	12,172	32.8	14,133	2.2	13,177	2.1	13,112	2.1
Category 5	Waste from business operations	5,410	13.2	5,899	15.9	5,777	0.9	6,886	1.1	5,738	0.9
Category 6	Business travel	321	0.8	327	0.9	330	0.1	328	0.1	338	0.1
Category 7	Employee commuting	1,159	2.8	1,182	3.2	1,194	0.2	1,184	0.2	1,221	0.2
Category 8	Leased assets (upstream)	22	0.1	24	0.1	24	0.0	19	0.0	19	0.0
Category 9	Transportation and delivery (downstream)	11,770	28.7	10,916	29.4	11,156	1.8	11,065	1.8	10,894	1.8
Category 10	Processing of sold products	N/A	N/A								
Category 11	Use of sold products	N/A	N/A								
Category 12	Disposal of sold products	N/A	N/A								
Category 13	Leased assets (downstream)	59	0.1	59	0.2	38	0.0	0	0.0	0	0.0
Category 14	Franchises	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 15	Investments	N/A	N/A								

Total of Scope 3 (Category 1- Category 15) 41,041 100 37,131 100 629,484 100 627,963 100 614,841 100 (N/A: not applicable, -: no data)

(2) Group companies in Japan

Category	Boundary	FY2014 Emission		FY2015 Emission		FY2016 Emission		FY2017 Emission		FY2018 Emission	
		t-CO ₂	ratio (%)								
Category 1	Purchased goods and services	-	-	-	-	-	-	-	-	357,325	96.2
Category 2	Capital goods	-	-	-	-	-	-	-	-	-	-
Category 3	Fuel and energy related activities not included in Scope 1 or 2	-	-	-	-	-	-	-	-	-	-
Category 4	Transportation and delivery (upstream)	-	-	-	-	-	-	-	-	-	-
Category 5	Waste from business operations	12,243	90.9	16,462	93.2	15,584	92.6	14,600	92.0	12,872	3.5
Category 6	Business travel	248	1.8	244	1.4	241	1.4	243	1.5	253	0.1
Category 7	Employee commuting	896	6.7	880	5.0	870	5.2	877	5.5	911	0.2
Category 8	Leased assets (upstream)	42	0.3	33	0.2	26	0.2	24	0.2	21	0.0
Category 9	Transportation and delivery (downstream)	-	-	-	-	-	-	-	-	-	-
Category 10	Processing of sold products	N/A	N/A								
Category 11	Use of sold products	N/A	N/A								
Category 12	Disposal of sold products	N/A	N/A								
Category 13	Leased assets (downstream)	35	0.3	42	0.2	108	0.6	132	0.8	89	0.0
Category 14	Franchises	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 15	Investments	N/A	N/A								
Total of Scope3 (Category 1- Category 15)		13,464	100	17,661	100	16,830	100	15,876	100	371,470	100

(N/A: not applicable, -: no data)

(3) Group Companies in other countries

Category	Boundary	FY2014 Emission		FY2015 Emission		FY2016 Emission		FY2017 Emission		FY2018 Emission	
		t-CO ₂	ratio (%)								
Category 1	Purchased goods and services	-	-	-	-	-	-	-	-	132,934	94.7
Category 2	Capital goods	-	-	-	-	-	-	-	-	-	-
Category 3	Fuel and energy related activities not included in Scope 1 or 2	-	-	-	-	-	-	-	-	-	-
Category 4	Transportation and delivery (upstream)	-	-	-	-	-	-	-	-	-	-
Category 5	Waste from business operations	3,296	70.9	3,595	71.4	3,854	70.3	4,427	72.6	5,382	3.8
Category 6	Business travel	165	3.5	181	3.6	172	3.1	180	3.0	190	0.1
Category 7	Employee commuting	593	12.8	654	13.0	621	11.3	650	10.7	685	0.5
Category 8	Leased assets (upstream)	584	12.6	600	11.9	835	15.2	839	13.8	839	0.6
Category 9	Transportation and delivery (downstream)	-	-	-	-	-	-	-	-	-	-
Category 10	Processing of sold products	N/A	N/A								
Category 11	Use of sold products	N/A	N/A								
Category 12	Disposal of sold products	N/A	N/A								
Category 13	Leased assets (downstream)	9	0.2	6	0.1	0	0.0	0	0.0	362	0.3
Category 14	Franchises	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Category 15	Investments	N/A	N/A								
Total of Scope3 (Category 1- Category 15)		4,647	100	5,037	100	5,483	100	6,096	100	140,392	100

(N/A: not applicable, -: no data)

Categories of Greenhouse Gas Emissions Throughout the Supply Chain and Emissions Subject to Calculation

Category	Emissions subject to calculation
I. Direct emissions (Scope 1)	<ul style="list-style-type: none"> ■ Direct emissions from the use of fuel and industrial processes by the reporting company
II. Energy-derived indirect emissions (Scope 2)	<ul style="list-style-type: none"> ■ Emissions from the use of electricity and heat purchased by the reporting company
III. Other indirect emissions (Scope 3)	<ul style="list-style-type: none"> • Added as a new calculation item in FY2016 • Expansion of calculation range for some new items in FY2018

Other indirect emissions (Breakdown of Scope 3)

Category 1	<p>Emissions from activities up to the manufacture of raw materials, parts, purchased goods, sales-related materials, etc.</p> <ul style="list-style-type: none"> • Calculated for JSR only from FY2016. • Expansion of calculation range for some new items in FY2018.
Category 2	<p>Emissions from the construction and manufacturing of the reporting company's capital goods</p> <ul style="list-style-type: none"> • Calculated for JSR only from FY2016.
Category 3	<p>Emissions from the procurement of fuel used in power generation, etc., for electricity and heat procured from other entities</p> <ul style="list-style-type: none"> • Calculated for JSR only.
Category 4	<p>(1) Emissions from the distribution of raw materials, parts, purchased goods, sales-related materials, etc., up to delivery to the reporting company</p> <p>(2) Emissions (emissions from the distribution paid for by the reporting company) amount of activity from distribution services other than (1) above (transport, handling, and storage) purchased in the fiscal year of the report: Amount of shipment distribution in Japan and other countries</p> <ul style="list-style-type: none"> • Calculated for JSR only.
Category 5	Emissions from the transportation and processing of waste generated by the reporting company
Category 6	Emissions from employee business travel
Category 7	Emissions from employee transportation when commuting to and from the place of business
Category 8	Emissions from the operation of assets leased to the reporting company (excluding emissions calculated under Scope 1 or 2)
Category 9	<p>Emissions from the transport, storage, cargo handling, and retail sales of products (limited to those items not paid for by the reporting company)</p> <ul style="list-style-type: none"> • Calculated for JSR only.
Category 10	Emissions from the processing of intermediate products by the reporting company
Category 11	<p>Emissions from the use of products by users (consumers and companies)</p> <ul style="list-style-type: none"> • This category is excluded from calculation because the company is a chemical intermediates manufacturer and the category is not applicable to the use of sold products.
Category 12	<p>Emissions from the transportation and processing of products upon disposal by users (consumers and companies)</p> <ul style="list-style-type: none"> • This category is excluded from calculation because the company is a chemical intermediates manufacturer.
Category 13	Emissions from the operation of assets leased to other entities
Category 14	<p>Emissions from franchises</p> <ul style="list-style-type: none"> • No emissions; business structures are not franchises.
Category 15	<p>Emissions from investment to earn profit</p> <ul style="list-style-type: none"> • This category is excluded from calculation because it is not applicable to "investment to earn profit."

FY2018 Emissions of Chemical Substances (PRTR)

Totals for JSR Corporation (Yokkaichi Plant, Chiba Plant, Kashima Plant and Tsukuba Research Laboratories)

Ordinance designated number	Substance	Amounts handled* ² (t)	Emissions			Transfers* ³ (t)
			Atmosphere (t)	Water (t)	Soil (t)	
1	Zinc compounds (water-soluble)	1.3	0.0	1.3	0.0	0.0
2	Acrylamide	68.1	0.0	0.0	0.0	0.0
4	Acrylic acid and its water-soluble salts	1,076.5	0.0	0.0	0.0	0.0
7	n-Butyl acrylate	7.7	0.0	0.0	0.0	0.0
9	Acrylonitrile	16,140.1	0.4	0.0	0.0	1.1
13	Acetonitrile	107.4	0.2	0.6	0.0	10.6
20	2-Aminoethanol	1.1	0.0	0.0	0.0	0.0
28	Allyl alcohol	7.6	0.0	0.0	0.0	7.1
30	n-Alkylbenzenesulfonic acid and its salts (limited to those with 10 to 14 alkyl group carbons and their mixtures)	637.4	0.0	0.0	0.0	0.0
36	Isoprene	64,609.1	0.2	0.0	0.0	0.2
53	Ethylbenzene	1.3	0.0	0.0	0.0	0.0
71	Ferric chloride	21.4	0.0	0.0	0.0	0.0
80	Xylene	2.6	0.0	0.0	0.0	0.3
86	Cresol	7.1	0.0	0.0	0.0	0.0
150	1,4-Dioxane	1.4	0.0	0.0	0.0	1.3
186	Dichloromethane (also called methylene chloride)	11.2	2.7	0.0	0.0	4.2
190	Dicyclopentadiene	14,466.5	0.1	0.0	0.0	31.9
202	Divinylbenzene	28.6	0.0	0.0	0.0	0.0
203	Diphenylamine	59.0	0.0	0.0	0.0	0.0
207	2,6-di-tert-butyl-4-cresol (also called BHT)	632.5	0.5	0.0	0.0	0.0
220	Water-soluble salts of dimethyldithiocarbamic acid	51.2	0.0	0.0	0.0	0.0
230	N-(1,3-dimethylbutyl)-N'-phenyl-p-phenylenediamine	233.2	0.0	0.0	0.0	0.0
240	Styrene	60,978.0	7.5	0.0	0.0	0.9
274	Tert-dodecanethiol	636.9	0.0	0.0	0.0	0.0
276	3, 6, 9-triazaundecane-1, 11-diamine (also called tetraethylenepentamine)	12.6	0.0	0.0	0.0	0.6
300	Toluene	2,165.6	53.0	0.1	0.0	174.3
321	Vanadium compounds	37.3	0.0	0.0	0.0	36.5
337	4-Vinyl-1-cyclohexene	110.0	0.0	0.0	0.0	0.6
351	1,3-Butadiene	560,907.4	7.5	0.0	0.0	1.5
355	Bis (2-ethylhexyl) phthalate	54.0	0.0	0.0	0.0	0.1
392	n-Hexane	447.3	22.8	0.0	0.0	56.8
395	Water-soluble salts of peroxodisulfuric acid	913.7	0.0	0.0	0.0	0.0
405	Boron compounds	1.4	0.0	0.6	0.0	0.0
411	Formaldehyde	1.8	0.0	0.0	0.0	0.0
415	Methacrylic acid	72.1	0.0	0.0	0.0	0.0
420	Methyl methacrylate	1,216.2	0.4	0.0	0.0	0.1
440	1-Methyl-1-phenylethyl hydroperoxide	1.1	0.0	0.0	0.0	0.0
	Total	725,727.1	95.4	2.6	0.0	328.1
243	Dioxins* ³	—	1.1426	0.0071	0.0000	0.0000

*1 The handling amount represents the value after base deduction (1 ton/year per place of business)

*2 The transfer amount is the amount committed to intermediate waste service companies plus the amount discharged into public sewers

*3 Dioxin category unit: mg-TEQ

◆ Social Data

Human Resources Data								
	Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
Consolidated number of employees	JSR Group	Person	5,990	6,587	6,790	7,203	8,748	
Non-regular employee ratio (non-regular / employee + non-regular)	JSR Group	%	–	10	11	9	13	
Employee ratios by region	Japan	JSR Group	%	–	70	68	64	60
	Asia (excluding Japan)			–	20	18	19	16
	United States			–	8	9	13	20
	Europe			–	2	5	4	4

As of the end of each fiscal year (March 31)

			Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Number of employees		Male	JSR Corporation*2	Person	2,782	2,824	2,858	2,848	2,883
		Female			464	468	470	483	494
		Total			3,246	3,292	3,328	3,331	3,377
Number of hires	New graduates*1	Male			82	83	80	66	74
		Female			15	6	15	15	15
		Total			97	89	95	81	89
	Mid-career	Male			32	62	19	23	31
		Female			7	8	3	4	11
		Total			39	70	22	27	42
Average number of years of continuous service		Male	Year	13.4	13.2	13.0	13.2	12.9	
		Female		13.6	14.2	14.8	15.1	14.8	
		Total		13.4	13.3	13.2	13.5	13.2	
Turnover rate for personal reasons				%	–	0.9	1.1	1.1	1.4
Turnover rate within three years of joining company					4.2	3.4	2.1	1.1	6.4

As of the end of each fiscal year (March 31)

*1 As of the beginning of each fiscal year (April 1)

*2 Including seconded employees

Annual Total Working Hours/Annual Total Overtime Hours/Average annual salary							
	Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Per-person total working hours	JSR Corporation*2	Hour	–	1,986	1,977	1,966	1,969
Per-person total overtime hours			–	231	225	215	220
Average annual salary*3	JSR Corporation	千円	7,415	7,465	7,424	7,432	7,551

*2 Including seconded employees

*3 Average annual salary includes bonuses and non-standard wages.

Education/Training and Overseas Assignments

	Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Per-person total training hours*4	JSR Corporation*2	Hour	–	18.8	17.7	16.8	14.7
e-learning program on the Principles of Corporate Ethics	JSR Corporation & its group companies in Japan	Hour/ Person	0.5	0.5	0.5	0.5	0.5
e-learning program on the confidential information management			–	0.5	0.5	0.5	0.5
e-learning program on anti-monopoly law · anti-corruption · subcontract law management			–	–	0.5	0.5	0.5
e-learning program on work style reform law			–	–	–	–	0.5
e-learning program on information security			–	–	–	0.5	0.5
e-learning program on quality compliance			–	–	–	0.5	1.0
Number of employees sent to overseas training	JSR Corporation*2	Person	–	12	12	9	8

*2 Including seconded employees

*4 This total was calculated by including technology and skill training, employee level-based training, and other training organized by human resources departments. It therefore does not include hours spent in education provided by organizations other than human resources departments, education provided independently by individual departments, or external education.

Diversity Development

	Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
Percentage of women hired annually per position*1	College graduates, engineering positions	JSR Corporation*2	%	20	9	15	20	18
	College graduates, administrative position			20	33	60	50	45
Percentage of women in managerial positions*1	4.0			3.8	3.6	3.8	4.1	
Career Re-Entry System	Registered	JSR Corporation*2	Person	8	4	5	4	5
	Rehired			0	0	1	1	2
Hiring of foreign nationals	JSR Corporation*2	Person	–	4	3	3	1	
Employment rate of individuals with disabilities	JSR Corporation*2	%	2.28	2.23	2.32	2.47	2.43	

As of the end of each fiscal year (March 31)

*1 As of the beginning of each fiscal year (April 1)

*2 Including seconded employees

Work-Life Management Data									
Number of work-balance support benefit users		Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
Fertility treatment	Shortened working hours	JSR Corporation*2	Person	0	0	0	1	2	
Childbirth	Prenatal & postpartum maternity leave system*5			15	20	23	21	24	
	Childcare leave system*5			Female	18	20	19	24	22
				Male	2	5	11	41	38
				Total	20	25	30	65	60
	Extended childcare leave counseling			13	12	14	13	28	
Balancing work and childcare	Shortened working hours*6			77	81	87	91	101	
	Work from home*6			11	10	10	9	15	
Balancing work and nursing care	Shortened working hours			3	4	2	3	1	
	Work from home			0	2	1	1	0	
	Nursing-care leave*5			1	6	3	8	7	
	Extended nursing-care leave			0	1	1	0	1	
Other	Lending of mobile devices with remote access to the company network			3	2	4	13	6	
	Discretionary labor system*1	107	103	107	108	111			
	Special volunteer leave(The value in parentheses represents the total number of leave days taken)	3 (5)	4 (11)	3 (7)	0 (-)	7 (17)			

As of the end of each fiscal year (March 31)

*1 As of the beginning of each fiscal year (April 1)

*2 Including seconded employees

*5 Per employee request, mobile devices with remote access to the company network are provided under this benefit.

*6 Number includes pregnant benefit users.

Number of employees eligible for work-balance support allowances	Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Extended childcare leave allowance	JSR Corporation*2	Person	18	25	26	67	53
Post-childcare leave reinstatement allowance			23	15	19	16	30
Daycare allowance			2	5	6	7	15

As of the end of each fiscal year (March 31)

*2 Including seconded employees

Workplace Accidents (calendar year)

		Boundary	Unit	FY2014* ⁵	2015	2016	2017	2018
Number of Workplace Accidents Lost time injury () Indicates non-working accident	JSR Corporation	Same as shown at left	Accident	1	1	0 (1)	2 (3)	0 (0)
	Manufacturing partners of JSR			0	2	1 (2)	2 (0)	1 (0)
	Group companies in Japan			1	2	2 (1)	0 (3)	2 (3)
	Manufacturing partners of Group companies in Japan			2	1	1 (1)	2 (2)	0 (2)
Lost time injury	Frequency* ⁶	JSR Corporation	–	0.22	0.22	0.00	0.48	0.00
	Severity* ⁷		–	0.22	0.22	0.00	0.48	0.00

*5 Figures for 2014 are fiscal year figures.

*6 Frequency = (Deaths or injuries in workplace accidents resulting in absence from work ÷ total working hours for all employees) x 1 million□

*7 Severity = (Total days of lost work accidents / Total number of actual working hours) x 1000

設備災害 (暦年)

		Boundary	Unit	2014	2015	2016	2017	2018
Number of facility accidents	leakage	JSR Corporation	Accident	1	1	0	1	2
	Fire			1	1	1	1	0
	Other			0	0	0	0	0
	leakage	Group companies in Japan	Accident	0	0	0	1	3
	Fire			0	1	0	0	1
	Other			0	0	0	0	0

◆ Governance Data

Corporate Governance			Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
Board of Directors	Inside Directors (executive directors)	Male	JSR Corporation	Person	4	5	4	4	4	
		Female			0	0	0	0	0	
		Total			4	5	4	4	4	
	Independent Outside Directors (non-executive directors)	Male			3	3	3	3	3	
		Female			0	0	0	0	0	
		Total			3	3	3	3	3	
	Total	Male			7	8	7	7	7	
		Female			0	0	0	0	0	
		Total			7	8	7	7	7	
	% Independent Outsider				%	43	43	43	43	43
	% Female Director				%	0	0	0	0	0
Term of Office		Year/Term	1	1	1	1	1			
Maximum age limit for directors		Years old	Not specified							
Number of BOD meetings held in a fiscal year				Times	17	17	17	17	17	
			Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
Audit & Supervisory Board (formerly known as Statutory Auditors Board)	Insider	Male	JSR Corporation	Person	1	1	1	1	1	
		Female			0	0	0	0	0	
		Total			1	1	1	1	1	
	Independent Outsider	Male			1	1	1	1	1	
		Female			1	1	1	1	1	
		Total			2	2	2	2	2	
	Total	Male			2	2	2	2	2	
		Female			1	1	1	1	1	
		Total			3	3	3	3	3	
	% Independent Outsider				%	67	67	67	67	67
	% Female Audit & Supervisory Board Member				%	33	33	33	33	33
Term of office		Year/Term	4	4	4	4	4			
Number of Audit & Supervisory Board meetings held in a year				Times	19	19	19	19	18	
			Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
Nomination Advisory Committee	Chaired by Independent Outside Director		JSR Corporation	Yes/No	–	Yes	Yes	Yes	Yes	
	Committee Member	Independent Outside Directors		Person	–	3	3	3	3	
		Inside Director		–	2	2	2	2		
		Total		–	5	5	5	5		
	Number of meetings held in a year			Times	–	1	3	3	3	
Remuneration Advisory Committee	Chaired by Independent Outside Director		JSR Corporation	Yes/No	Yes	Yes	Yes	Yes	Yes	
	Committee Member	Independent Outside Directors		Person	3	3	3	3	3	
		Inside Director		1	1	1	1	1		
		Total		4	4	4	4	4		
	Number of meetings held in a year			Times	3	3	4	4	4	

		Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Number of officers*	Male	JSR Corporation	Person	22 (3)	20 (3)	21 (3)	24 (3)	24 (3)
	Female			1 (0)	1 (0)	1 (0)	1 (0)	1 (0)
	Total			23 (3)	21 (3)	22 (3)	25 (3)	25 (3)

*Does not include directors concurrently serving as executive managing officers.

Remuneration for Directors and Audit & Supervisory Board Members

			Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Remuneration for Directors	Inside Directors	Basic Remuneration (Fixed remuneration)	JSR Corporation	Million yen	153	158	195	183	186
		Annual Bonuses (Short term performance linked remuneration)			39	21	48	69	50
		Medium-term performance-based bonus							25
		Restricted Stock Shares (Remuneration in share stock)			-	-	-	28	37
		Deep Discounted Stock Option (Remuneration in share stock)			29	30	34	9	-
		Sub-total			221	209	277	289	298
	Outside Directors	Basic Remuneration (Fixed remuneration)			36	39	40	40	42
		Sub-total			36	39	40	40	42
	Total				257	248	317	329	340
	Remuneration for Audit & Supervisory Board members	Inside Audit & Supervisory Board Member			Basic Remuneration (Fixed remuneration)	JSR Corporation	Million yen	27	28
Sub-total			27	28	28			28	29
Outside Audit & Supervisory Board Members		Basic Remuneration (Fixed remuneration)	11	15	17			17	20
		Sub-total	11	15	17			17	20
Total		38	43	45	45			49	

List of Remuneration for individual Directors paid in FY2018

Name	Position	Name of Company	Unit	Description of consolidated remuneration				
				Basic Remuneration	Restricted Stock shares	Medium-term performance-based bonus	Stock Option as Remuneration	Total
Mitsunobu Koshiba	Director	JSR Corporation	Million yen	78	22	17	20	137

* the above list is limited to Directors whose annual remuneration amounted for one (1) hundred million yen or more.

Accounting Auditors

		Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Amount of remuneration for Accounting Auditors	Remuneration for services relating to auditing or certifying the financial documents	JSR Corporation and its consolidated subsidiaries	Million yen	63	69	68	67	87
	Remuneration for non-auditing services			0	16	5	24	0

Activities of Directors and Audit & Supervisory Board Members in FY2018

Name	Title*	Age*	Tenure*	Activities	Attendance to the meetings in fiscal year ending in March 2019		
Mr. Mitsunobu Koshiba	Representative Director and President	63	13 years	Mr. Koshiba, as a representative director and President, has been pushing forward JSR's midterm management plan "JSR2019" to realize the JSR's objectives for 2020, while further strengthening the Company's corporate governance standards and thereby enhancing the trust of all stakeholders of the Company. He has been contributing further to the enhancement of JSR's corporate value by utilizing his vast experience and knowledge to help the Company in making crucial decisions and to supervise the performance of duty at the BOD level.	BOD	times/times 17 / 17	100%
					Nomination Advisory Committee	3 / 3	100%
					Remuneration Advisory Committee	4 / 4	100%
Mr. Koichi Kawasaki	Director and Senior Managing Officer	62	3 years	Mr. Kawasaki, as a representative director and a director in charge of Manufacturing and Technology, Product Safety & Quality Assurance, Procurement, Logistics, and Safety and Environment Affairs, has been contributing to further enhancement of JSR's corporate value by utilizing his vast experience and knowledge to help the Company in making crucial decisions and to supervise the performance of duty at the BOD level.	BOD	17 / 17	100%
Mr. Nobuo Kawahashi	Director and Senior Managing Officer	62	3 years	Mr. Kawahashi is involved with a broad range of research in the Research and Development Department that helps expand JSR's business. He is also currently in charge of Research & Development as well as human resources development and diversity development. He utilizes his abundant work experience and knowledge in decision-making concerning important matters and supervising work execution at Board of Directors meetings, and he contributes to the continuous improvement of the Group's corporate value.	BOD	17 / 17	100%
Mr. Hideki Miyazaki	Director and Managing Officer	61	1 year	Mr. Miyazaki, as a director in charge of Office of Accounting, Finance, Corporate Communication, has been contributing further to the enhancement of JSR's corporate value by utilizing his vast experience and knowledge to help the Company in making crucial decisions and to supervise the performance of duty at the BOD level.	BOD	13 / 13	100%
Mr. Yuzuru Matsuda	Independent Outside Director	70	4 years	Mr. Matsuda, as an independent outside director, has been contributing further to the enhancement of JSR Group's corporate value by utilizing his vast experiences in management and global businesses of medical, biochemical and pharmaceutical products as well as independent viewpoints to help the Company in making crucial decisions, to supervise the performance of duty at the BOD level. In addition, he has been contributing, by appropriately acting as the Chairman of the Nomination Advisory Committee and the Remuneration Advisory Committee respectively to strengthen the Company's fair corporate governance through enhancement of fair and reasonable business judgment and transparent and sound management, thereby continually.	BOD	17 / 17	100%
					Nomination Advisory Committee	3 / 3	100%
					Remuneration Advisory Committee	4 / 4	100%

Name	Title*	Age*	Tenure*	Activities	Attendance to the meetings in fiscal year ending in March 2019		
Mr. Shiro Sugata	Independent Outside Director	69	3 years	Mr. Sugata, as an independent outside director, has been contributing further to the enhancement of JSR Group's corporate value by utilizing his vast experience in management and global businesses of optical application products and industrial machineries as well as independent viewpoints to help the Company in making crucial decisions, to supervise the performance of duty at the BOD level, and to strengthen the Company's fair corporate governance through enhancement of fair and reasonable business judgment and transparent and sound management.	BOD	17 / 17	100%
					Nomination Advisory Committee	3 / 3	100%
					Remuneration Advisory Committee	4 / 4	100%
Mr. Tadayuki Seki	Independent Outside Director	69	1 year	Mr. Seki, as an independent outside director, has been contributing further to the enhancement of JSR Group's corporate value by utilizing his vast experiences in management and finance as a CFO of a major global trading house as well as independent viewpoints to help the Company in making crucial decisions, to supervise the performance of duty at the BOD level, and to strengthen the Company's fair corporate governance through enhancement of fair and reasonable business judgment and transparent and sound management.	BOD	13 / 13	100%
					Nomination Advisory Committee	3 / 3	100%
					Remuneration Advisory Committee	4 / 4	100%
Mr. Atsushi Kumano	Full-time Audit & Supervisory Board Member	62	3 years	Mr. Kumano, as an inside full-time audit & supervisory board member, has been contributing to ensure fair and reasonable judgment for, and accountable and sound management of, the businesses of the Company by utilizing his vast experience and knowledge on the businesses of the Company and sharing them with other outside members to audit the Directors' decision-making and execution of operation.	BOD	17 / 17	100%
					Audit & Supervisory Board	18 / 18	100%
Ms. Hisako Kato	Independent Outside Audit & Supervisory Board Member	70	5 years	Ms. Kato, as an independent outside audit & supervisory board member, has been contributing to ensure fair and reasonable judgment for, and accountable and sound management of, the businesses of the Company by utilizing vast financial and accounting expertise as a Certified Public Accountant and a Certified Tax Accountant as well as independent outside viewpoint to audit the Directors' decision-making and execution of operation.	BOD	17 / 17	100%
					Audit & Supervisory Board	18 / 18	100%
Mr. Sumio Moriwaki	Independent Outside Audit & Supervisory Board Member	62	2 years	Mr. Moriwaki, as an independent outside audit & supervisory board member, has been contributing to ensure fair and reasonable judgment for, and accountable and sound management of, the businesses of the Company by utilizing vast expertise in legal affairs as a lawyer as well as independent outside viewpoint to audit the Directors' decision-making and execution of operation.	BOD	17 / 17	100%
					Audit & Supervisory Board	18 / 18	100%

*As of June 18, 2019 (at the close of the 74th AGM of the Company)

Compliance								
		Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Amount of corporate income tax paid	JSR Corporation and consolidated subsidiary in Japan	same as the left hand column	Million yen	-	-	-	12,565	9,547
	Consolidated Subsidiaries in other countries			-	-	-	2,204	1,434
Political Donations/contribution		JSR Corporation		-	-	-	0	0

		Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
Number of CSR Committee meetings held in a year		JSR Corporation	Times	6	5	6	7	4
Violation of each country's anti-corruption laws and international standards	Number of violations	JSR Group	Times	0	0	0	0	0
	Penalty	JSR Group	Yen	0	0	0	0	0
Number of times the JSR Group hotline was used		JSR Corporation	Number	8	5	3	2	6
		Group companies		6	11	3	4	10
		Unknown		0	0	0	0	1
Number of times the supplier hotline was used		JSR Corporation	Number	0	0	0	0	0
		Group companies		0	0	0	0	0

Research and Development (R&D)									
		Boundary	Unit	FY2014	FY2015	FY2016	FY2017	FY2018	
R&D expenses		JSR Group	Billion yen	22.5	21.5	19.7	20.3	24.9	
		JSR Corporation	Billion yen	17.4	16.4	15.5	16.5	19.1	
Number of researchers		JSR Corporation	Person	728	707	673	680	727	
Number of patents held		Japan	JSR Corporation	Number	3,124	3,260	3,266	3,282	3,258
		Other countries			3,370	3,642	3,738	3,812	3,793
		Total			6,494	6,902	7,004	7,094	7,051

◆Policy / Guidelines / Philosophy

Environment

Environment and Safety Management Policy

JSR Group developed its Environment Safety Management Policy promotion items with reference to management policies based on our responsibility to stakeholders and the Japan Chemical Industry Association's policies on the environment and safety.

Promotion Items and Policy

1. Development of safety-focused and environmentally friendly products

When developing new products, JSR Group evaluates the environmental, safety and health impact at every stage from research and development to production, transport, use and disposal, and makes the utmost effort to provide products that take such evaluations into consideration.

2. Provide safety and environmental information related to products

JSR Group sets in place a system for the management of product-related safety and environmental information, and provides Safety Data Sheets (SDS) to customers and yellow cards to transporters as necessary.

3. Preserve the environment and assure safety for local residents

JSR Group takes a positive approach in its measures for preserving the global environment, facility safety, and protection against major earthquakes, taking into consideration the impact its business activities have on the environment. JSR Group's objective is to earn even greater trust at its business locations.

4. Reduce environmental impact

JSR Group conducts studies on the environmental impact of chemical substances and works toward the systematic reduction of emissions. JSR Group engages in thorough efforts to reduce sources of emissions, reuse materials, and recycle resources in order to reduce environmental impact.

5. Assure safety and environmental preservation in international operations

JSR Group cooperates with cross-border transfers of environmental and safety technologies. Regarding corporate activities overseas, JSR Group strictly complies with the regulations of Japan and other nations, and makes every effort to assure safety and environmental compliance at each operating site outside Japan.

6. Ensure employee health and safety

Constantly at work on the pre-assessment of safety matters related to chemical substances and their handling, JSR Group is dedicated to improving operations and facilities, and to creating a healthy and safe workplace environment.

Philosophy concerning Climate Change

JSR Group's Environment and Safety Management Policy establishes its philosophy concerning the environment, safety, and health and includes climate change.

1. Development of safety-focused and environmentally friendly products

When developing new products, JSR Group evaluates the environmental, safety and health impact at every stage from research and development to production, transport, use and disposal, and makes the utmost effort to provide products that take such evaluations into consideration.

Philosophy concerning Industrial Waste Reduction

JSR Group's Environment and Safety Management Policy establishes its philosophy concerning waste.

1. Development of safety-focused and environmentally friendly products

When developing new products, JSR Group evaluates the environmental, safety and health impact at every stage from research and development to production, transport, use and disposal, and makes the utmost effort to provide products that take such evaluations into consideration.

Philosophy concerning Biodiversity Conservation

JSR Group has formed biodiversity policies based on issues identified through conservation activities conducted in the past. We are currently promoting various activities in accordance with these policies.

JSR Group Biodiversity Policies

To contribute to the establishment of a sustainable society, JSR Group strives to identify how our business activities depend on and impact biodiversity, and to promote efforts in consideration of biodiversity.

1. We prioritize biodiversity conservation in procuring naturally derived raw and processed materials.
2. We work to make the green spaces of our business establishments biodiversity-friendly.
3. We strive to develop biodiversity-friendly products.
4. We emphasize staff engagement and cooperation with local communities.

established in April 2012

Social

Philosophy concerning Human Rights

Philosophy concerning Respect for Human Rights

JSR Group's Principles of Corporate Ethics establish its philosophy concerning human rights.

Code of Conduct for Respecting Human Rights

① We will respect and uphold basic human rights, such as United Nations "The Universal Declaration of Human Rights", United Nations "Guiding Principles on Business and Human Rights", declared internationally and protected under constitution and legal precedents of respective countries, and will not infringe basic human rights.

Code of Conduct for Fair and Proper Transactions

④ With regard to purchase transactions, we shall conduct transactions that are fair, transparent, and based on economic rationality, as well as consider our responsibility to society, such as compliance with laws and ordinances, protection of resources, environmental conservation, safety and human rights.

Code of Conduct for Providing a Comfortable Work Environment

⑦ In the event that a staff member reports the violation or possible violation of the law and/or the Principles of Corporate Ethics to his/her superiors and/or internal/external hotline, we shall fully protect the said staff member's identity and protect him or her from unfavorable treatment.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Philosophy concerning Inhumane Acts (Harassment)

JSR Group's Principles of Corporate Ethics establish its philosophy concerning inhumane acts (harassment).

Code of Conduct for Providing a Comfortable Work Environment

⑤ We shall provide a workplace free from sexual harassment and any harassment arising from positions of power. In addition, we will not engage in or make verbal comments with sexual connotations that will make counterparts feel uncomfortable.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Philosophy concerning Prevention of Discrimination

JSR Group's Principles of Corporate Ethics establish its philosophy concerning prevention of discrimination.

Code of Conduct for Providing a Comfortable Work Environment

- ① We shall ensure the fair treatment of employees, based on each person's tasks, roles, and level of commitment.
- ③ We shall respect the human rights and diverse characteristics of all individuals, and shall not discriminate against gender, age, nationality, race, ethnic group, origin, religion, beliefs, social status, physical disability or other relevant conditions when determining employment status and/or working conditions.
- ④ We shall not force religion and/or belief on others.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Philosophy concerning Child Labor and Forced Labor

JSR Group's Principles of Corporate Ethics establish its philosophy concerning child labor and forced labor.

Code of Conduct for Respecting Human Rights

- ③ We shall never allow child labor or forced compulsory labor, whether at the JSR Group or in the workplaces of business partners and collaborating companies.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Philosophy concerning Collective Bargaining

JSR Group enters into labor agreements with labor unions based on its Principles of Corporate Ethics, which establish its philosophy concerning collective bargaining.

Code of Conduct for Respecting Human Rights

- ② We will abide by national and international labor codes and respect workers' right of association and right for collective negotiation in the realm of basic labor rights.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Philosophy concerning Customers

JSR Group's Management Policies establish its philosophy concerning its customers.

Management Policies

Responsibility to Our Stakeholders

Responsibility to Our Customers / Business Partners

- Constantly evolve to meet the demand for new materials
- Always strive to increase customer satisfaction
- Act in good faith and maintain fair and equitable business relations
- Continue to be socially and environmentally conscious throughout the supply chain

Philosophy concerning Social Contribution

JSR Group has been involved in various social contribution programs with a focus on community activities. In January 2009 we established our "Basic Approach to Social Contribution" as a philosophy aimed at further strengthening our activities. We are currently implementing the initiatives outlined in this philosophy.

Basic Philosophy concerning Social Contribution

- (1) Our Corporate Mission dictates that we contribute to society through our business activities. Further, we are actively engaged in providing solutions to social requirements and issues as a responsible member of society.
- (2) We are continuously engaged in positive social contribution activities, capitalizing on the chemical and technical knowledge and skills that form the core of JSR business.
- (3) Every employee is a point of contact between the Company and society, and we actively support our employees in their voluntary participation in social contribution activities.

Basic Approach to Social Contribution, established in January 2009

Fundamental Philosophy concerning Employees

Fundamental Human Resource Philosophy

JSR Group drives its organization and personnel forward based upon the following measures:

1. Develop mechanisms and a corporate culture with a healthy balance of 'Freedom' and 'Discipline,' guided by the Course of Action's 4Cs to enable managers and junior staff to grow together, help all employees accurately perceive and solve issues in order to foster a JSR that not only maintains its organizational capacity, but ensures its future growth.
2. Promote the globalization of JSR corporation employees while developing a globalized workforce within JSR Group as well as train and manage the Group's human resources on a global level.
3. Generate synergies which take full advantage of the increasing range of diversity (in terms of nationality, culture, gender, values, etc.) throughout JSR Group's vast human resource pool.

Human Resource Development Philosophy

We are working on human resource development with the understanding that it is the greatest priority for achieving sustainable, long-term corporate growth. In particular, we are promoting human resource development in order to strengthen our organizational capacity by implementing the Course of Action "The 4Cs" - "Challenge," "Communication," "Collaboration," and "Cultivation" - of our Course of Action at a higher level, and with focus on "skill/know-how" and "awareness/motivation."

Human Resources = Skill and Know-How x Motivation

As a key goal, we will also strengthen our employees' international communication abilities.

(1) Human Resource Development Policy

1. Respect each employee's desire for personal growth and provide adequate support for employees who take the initiative to raise their skills and develop their careers.
2. Based on the idea that the development of employee skills is the foundation of a company, make "growth through work" a primary consideration and, from a long-term perspective, conduct systematic, planned, and continuous training at all group companies to support this.

(2) Types of Personnel Sought by JSR

All Employees

1. Professionals who are competitive on a global level in all areas of their responsibility.
2. Individuals who are willing to take on new challenges and who respond flexibly to changes in the environment, supporting innovation and advancement without settling for the status quo.

3. Team players with high ethical standards who emphasize communication, collaboration, cultivation, and taking on challenges.

Management

4. Supervisors who can delegate work and responsibilities to their junior staff while also leading by example, always mindful of organizational management and human resource development.

5. Leaders who effectively oversee the achievement of organizational goals and can also lead reforms.

Work-Life Management Philosophy

JSR is actively promoting its Work-Life Management initiative. Employees are encouraged to not only develop work-related skills, but to also actively participate in social, and personal activities (e.g., social and community groups, family, volunteer activities, self-development, and hobbies). JSR believes that by encouraging our employees to become well-rounded individuals, and by finding a personal sense of self-fulfillment and satisfaction that they will then be able to bring that energy into their work.

JSR encourages all of our employees to closely manage their personal time and maintain a balanced work schedule. We are also working on implementing various systems that support flexible work styles, with special consideration for childbirth, childcare and family-nursing needs.

Work-life management is vital in the implementation of diversity management, because in order to create an organization with a diverse workforce, we must also promote a corporate culture that is open to diverse values and work styles.

We also ensure wages at wages that exceed the minimum wage based on the laws and ordinances stipulated by each country / region, and strive not to violate working time regulations.

Philosophy concerning Employees' Mental and Physical Health

JSR feels that a healthy mind and body are extremely important for employees and their families to live happy lives. We also feel that they are imperative in the creation of a productive and vibrant workplace. Because of this, we have adopted various measures to help our employees work in good health, both mentally and physically.

Philosophy concerning the JSR Workers' Union's activities

Through routinely-convened labor-management councils, labor agreement revision consultations and the like, we strive to maintain a relationship with the union that allows constructive exchanges of opinions. We also work with the union to create better working environments from the standpoints of "wage policy", "workplace environment policy", "welfare policy", "leisure time, public relations, and volunteer activities policy" and "organization policy", which are important matters for the union.

Philosophy and Course of Action for Occupational Health and Safety, Policy for Security Management

Philosophy for Occupational Health and Safety

At JSR Corporation, safety is our highest priority and the foundation of all of our activities. Accordingly, we will create safe worksites and strive to maintain physical and mental health, with the goal of ensuring a safe return home at the end of each workday.



Courses of Action of Philosophy for Occupational Health and Safety

1. No matter the situation, we will act with safety foremost in mind.
2. We will comply with established rules and never fail to act in accordance with safety basics.
3. We will maintain safety by identifying and eliminating both actual and potential hazards.
4. We will strive to create comfortable work environments and promote physical and mental health.
Through communication and ingenuity, we will aim to
5. achieve 100% employee participation in all safety activities.



The safety monument

Policy for Security Management

- (1) Extremely Safe Behavior
The Philosophy for Occupational Health and Safety has penetrated through the organization, the Courses of Action are established as applying to everyone, and safety competency is improving through independent safety activities.
- (2) Enhanced Human Resources and Organizational Strength
High personal skills, organizational ability, and a healthy organizational culture are being maintained with the establishment and execution of the education and training programs needed for organizational management.
- (3) Optimal Risk Management and Security Measures
Security measures corresponding to risk importance are being efficiently and effectively implemented using new technologies.



JSR Group CSR / Sustainable Procurement Policy

JSR Group's Corporate Mission is "Materials Innovation - We create value through materials to enrich society, people and the environment."

Based on this, we make CSR activities a core part of our everyday operations. Our commitment to CSR includes establishing "The JSR Group Principles of Corporate Ethics" and consolidating our responsibilities to our customers/business partners, to our employees, to society, and to shareholders under management policies we call "Responsibility to Our Stakeholders."

At JSR Group, we believe that developing CSR supply chain management will lead to mutual prosperity for both the Group and our business partners. It was with this in mind that we established this JSR Group CSR/Sustainable Procurement Policy.

Below are listed 36 items in six areas that we ask our business partners to strictly observe. We call on our partners to accept them and put them into practice, keeping in mind the intent described above and fully understanding their content.

It should be understood that this policy may undergo review and revision as required in response to changes in society's demands on us.

I. Establishing and Maintaining a CSR Advancement Structure

Companies must of course comply with the laws and regulations of each country in which they do business. But they also have a responsibility to abide by social norms and meet society's expectations.

For the following Areas II to VI (fair corporate activity, human rights and labor, environmental conservation, health and safety, and information security), companies that do business with JSR Group must establish CSR mechanisms to ensure that their business activities do not negatively affect society and the environment and, if negative effects do occur, to deal with them immediately.

The following actions are required:

1. Incorporate CSR mechanisms into the company's policies and code of conduct, make them known among employees, and establish a department with the responsibility of executing them.
2. Have raw material suppliers and other business partners also understand and execute the CSR mechanisms.
3. Voluntarily announce the status of their initiatives through environmental reports, CSR reports, websites, and other media to the public.

II. Fair Corporate Activity

In the processes of producing products and services, companies must engage in business activities that are based on fair, transparent, and free competition.

The following actions are required:

1. Prohibition of corruption and bribery
2. Prohibition of giving or receiving inappropriate favors or payoffs
3. Prohibition of abuse of superior position
4. Prohibition of anti-competitive conduct
5. Provision of accurate product and service information
6. Respect for others' intellectual property rights

7. Proper import/export management
8. Proper tax payment according to the laws and regulations of each country
9. Prevention and early detection of improper behavior by maintaining an internal reporting system

III. Human Rights and Labor

Companies must act in accordance with the laws of each country and international standards, respect basic human rights, and give attention to the following items to ensure that their business activities do not violate human rights, either directly or indirectly.

The following actions are required:

1. Prohibition of forced labor
2. Prohibition of child labor and protection of young workers
3. Prohibition of inhumane treatment
4. Prohibition of discrimination in terms of employment, promotion opportunities, treatment, etc.
5. Payment of fair wages exceeding the minimum wage amount
6. Reduction of excessive working hours by proper management of working hours and non-work days
7. Respect for employees' freedom of association and right to collective bargaining

IV. Environmental Conservation

Companies have a responsibility to comply with the laws and standards of each country concerning environmental conservation, to specify and manage factors that impact on the environment by building a management system, and to work toward preserving the environment in their processes of producing products and services.

The following actions are required:

1. Establishment and operation of an environmental management system
2. Management of chemical substances and prevention of pollution
3. Reduction of environmental burden
4. Reduction of energy consumption and greenhouse gas (GHG) emissions
5. Resource conservation, resource recycling, and proper waste disposal
6. Conservation of water resources and reduction of water consumption
7. Preservation of biodiversity and reduction of negative impact
8. Disclosure of the status of environmental conservation initiatives

V. Health and Safety

Companies must comply with the laws and standards of each country concerning occupational health and safety and establish management systems and mechanisms to prevent workplace accidents, promote the health and safety of employees, and create comfortable workplace environments.

The following actions are required:

1. Safety measures for machinery and equipment

- 2 . Maintenance of workplace safety
- 3 . Maintenance of workplace health
- 4 . Employee health management
- 5 . Pre-emergency preparedness measures

VI. Information Security

Companies must properly manage and protect the information they obtain through business activities, take protective measures against threats to their computer networks, and manage the confidential information of customers and third parties in a manner that prevents leaks.

The following actions are required:

- 1 . Compliance with the laws and regulations of each country concerning information security
- 2 . Protection against threats to computer networks
- 3 . Prevention of personal information leaks
- 4 . Prevention of leaks of confidential information pertaining to customers and third parties

Enacted on December 10, 2018
JSR Corporation

Governance

Corporate Governance

Please refer to JSR's Corporate Governance Report by clicking the URL shown below. The following are the gist of the report.

http://www.jsr.co.jp/jsr_e/pdf/company/governance.pdf

Basic Views on Corporate Governance

It is the JSR Group's goal to make steady progress in realizing its corporate mission (Materials Innovation: We create value through materials to enrich society, people and the environment). This shall be done through efficient and transparent business management, by sustaining sound and healthy business practices. The Group will also continuously strive to create new corporate value with the hope of becoming an attractive corporation that can earn the trust of and satisfy the interests of all our stakeholders. The Company therefore has been and will continue focusing on the enhancement of corporate governance as an important management challenge.

Corporate governance structure

As a company with audit & supervisory board members (formerly known as statutory auditors), JSR principally monitors and oversees the execution of duties by directors and the management through its Board of Directors and audit & supervisory board members. JSR has continuously strengthened the function of management supervision, improved efficiency in decision making and execution of business duties, and enhanced the transparency and soundness of business management through the introduction of an officer system and the appointment of outside directors and audit & supervisory board members, who are independent from the Company and have extensive business experience and a high level of expertise.

Composition of Board of Directors

The current Board of Directors consists of seven (7) directors, three (3) of whom are independent outside directors with vast experience and extensive expertise in management of corporations and businesses. In the future, the Company will elect 1/3 (one third) or more independent outside directors with similar expertise in order to increase corporate value and oversee business management.

Composition of Audit & Supervisory Board (formerly known as Statutory Auditors Board)

The current Audit & Supervisory Board consists of three (3) audit & supervisory board members, two (2) of whom are independent outside audit & supervisory board members with extensive and sophisticated expertise (one is a lawyer and the other is a certified public accountant qualified as a certified public tax accountant as well). In the future, the Company will elect two independent outside audit & supervisory board members with vast experience and extensive and sophisticated expertise in such fields as law, accounting, and etc., to effectively audit the execution of duties by directors and the management.

Basic Policies on Remuneration for Directors and framework for determining the remuneration

Remuneration Advisory Committee

JSR established the Remuneration Advisory Committee of which majority members are independent outside directors and the chair of which is an independent outside director in order to ensure the objectivity and transparency of its directors' remuneration scheme. The committee deliberates the basic policy of remuneration, the remuneration structure, the mechanism of a performance-based remuneration, the setting of targets, and assessment of performance, and submits its findings to the Board of Directors.

Basic Policies

JSR set basic policies on remuneration of directors as follows: the remuneration scheme should increase corporate value over the medium and long-term, attract diverse and superior personnel, be linked to short-term, medium-term and long-term business performance, have management and shareholders share profits, and ensure high transparency. Remuneration for directors consists of a fixed basic remuneration, an annual bonus linked to the attainment level of business performance in each fiscal year, a medium-term business performance-based bonus linked to the attainment level of the medium and long-term business performance, and restricted stock shares as remuneration designed to facilitate earlier sharing of corporate values between directors and the shareholders of the Company. In light of their roles, remuneration for outside directors and audit and supervisory board members consists of basic remuneration only.

Policies and procedures for nominating candidates for Directors and Audit & Supervisory Board members

Nomination Advisory Committee

1) JSR established the Nomination Advisory Committee of which majority members are independent outside directors and the chair of which is an independent outside director to ensure the transparency of the policy and procedures of nominating candidates for directors, audit & supervisory board member and officers with directorship status (including senior officers). At the committee, any of the members is not eligible for voting in the agenda in which such member has special interest.

2) The committee deliberates the standard for the diversity in breadth of knowledge, experience, and capability necessary for the Board of Directors, criteria and procedures for the nomination, and candidates for future appointment as president, directors, officers with directorship status (including senior officers), and audit & supervisory board members, and submits its findings to the Board of Directors. In order to ensure transparency of the deliberation, the committee takes necessary measures as deliberation solely among outside independent directors for the agenda relating to appointment/reappointment or dismissal of CEO.

3) The committee systematically develops and selects candidates for the successor to CEO in an objective and transparent manner by providing the pool of candidates with necessary training and coaching to enhance skills and leadership and by actively participating in selection process through interviews etc.

Criteria for nominating candidates for Directors

1) When nominating candidates for directors, JSR makes it a rule to ensure an appropriate balance among diversity in breadth of knowledge, experience, and capability essential to the Board of Directors and the size thereof in order to make important management decisions and oversee the execution of duties in appropriate and timely fashion.

JSR nominates persons who are mentally and physically sound and have an exceptional personality and popularity, and high principles and ethical view.

2) Candidates for inside directors:

JSR nominates persons who have extensive knowledge, experience, and high capability with a superior track record in such fields as business management (including global one), R&D, manufacturing, manufacturing technology, human resources, and finance and accounting, etc.

3) Candidates for outside directors:

JSR nominates persons who have independence, vast experience and extensive expertise of management of the major companies in various fields and of business management both in Japan and overseas as well as the capability to actively express opinions and raise issues on growth strategy and enhancement of governance from a broad perspective.

4) The Nomination Advisory Committee will deliberate and report to the Board of Directors in a timely fashion when the committee judges there arises a reason that necessitates dismissal of CEO and/or other directors.

Criteria for nominating candidates for audit & supervisory board member

1) From the perspective of ensuring the transparency and soundness of business management through auditing the process of directors' decision making and execution of duties in accordance with laws and regulations, such as the Companies Act, the articles of incorporation and internal rules, JSR nominates persons with vast experience and extensive and sophisticated expertise necessary for audit (including one person with sufficient knowledge of finance and accounting) among those who are mentally and physically sound and have an exceptional personality and popularity, and high principles and ethical view.

2) Regarding candidates for outside audit & supervisory board members, in particular, JSR nominates persons who have independence and extensive experience and knowledge of laws and accounting.

Views on capability and diversity of the Board of Directors as a whole

1) With the aim of overseeing important management decision making and the execution of duties in appropriate and timely fashion in order to increase corporate value over medium and long-term, JSR considers it important that the Board of Directors as a whole effectively utilize both i) the extensive knowledge, experience and high capability in such fields as business management (including those of global businesses), R&D, manufacturing, manufacturing technology, human resources, and finance and accounting, etc. held by inside directors and ii) vast experience and extensive expertise of management of the companies in various fields and business and management both in Japan and overseas, and capability to actively express opinions and raise issues on growth strategy and enhancement of governance from a broad perspective held by independent outside directors and that the Board of Directors thus ensures such diversity in knowledge, experiences (including international ones) and skills as the Board of Directors deems fit and necessary.

2) The Company believes that its Board of Directors has acquired necessary diversities so that the Board is functioning effectively at present.

JSR will continue to ensure the sufficient diversity in knowledge, experience, and capability that are essential for the Board of Directors and maintain its optimum size but not exceeding 12 people in accordance with the deliberation to be made by the Nomination Advisory Committee and with its business strategies in the future.

Securing equitable Shareholders' rights

JSR has continued to develop an environment where shareholders can appropriately exercise their voting rights at the ordinary general meeting of shareholders.

JSR will continue to implement the following measures: holding an ordinary general meeting of shareholders earlier than other companies (in the middle of June each year); dispatching the notice of convocation of an ordinary general meeting of shareholders three (3) weeks prior to the date of the meeting; introducing an electronic voting platform via the Internet, etc.; participating in the electronic voting platform for institutional investors; enhancing contents of the convocation notice; and translating the convocation notice into English, etc.

Reduction of cross-shareholdings

JSR holds listed shares as cross-shareholdings* only after comprehensively reviewing the rationality of holding such shares in the light of business management strategies and economics of such shareholdings while it has been reducing cross-shareholdings when holding such shares has become irrational.

The Board of Directors periodically reviews the status and the policies for holding individual cross-shareholdings by taking such factors into consideration as the purpose of holding, potential risk and expected return, and cost of capital required for holding such individual shares.

When exercising voting rights of cross-shareholdings, JSR comprehensively determines to vote for or against their proposals after reviewing whether or not their corporate governance system and proposals will contribute to the improvement of their corporate value over the medium and long-term.

Ways to avoid conflict of interest transactions arising from the act of Directors

1) In accordance with the Companies Act and JSR's "Regulations of the Board of Directors", JSR has obtained the Board of Directors' prior approval for competitive and conflict-of-interest transactions and reported important facts regarding such transactions to the Board of Directors after completion.

2) In accordance with applicable laws and regulations, JSR has disclosed the outline of transactions with related parties in notes to consolidated financial statements of the Securities Report and notes to non-consolidated financial statements of the ordinary general meeting of shareholders.

3) JSR has been determining the terms and conditions for the transactions with major shareholders by negotiating prices considering market conditions in the same way as it deals with third parties.

Compliance

Code of Conduct and Corporate Ethics

JSR Group has established a Code of Conduct as the rules that all JSR Group companies, their directors and employees (full-time, contract, part-time, and temporary employees as well as employees on short-term contracts) should comply with, in order to execute the management policies "Our Responsibility to our Stakeholders" in engaging in business activities. JSR Group shall not require its directors or employees to act in violation of the Code of Conduct. Additionally, JSR Group shall not disadvantage any director or employee who refuses to execute an order to perform an act that is in violation of the Code of Conduct for the reason of said refusal.

Please click on the following link for the English version of "The Group Principles of Corporate Ethics"

http://www.jsr.co.jp/csr/pdf/CoC_en.pdf

Code of Conduct for anti-bribery and anti-corruption

The JSR Group established "Standards on Providing and Accepting Gifts and Entertainment" and "Regulations for Compliance with Anticorruption Laws" based on the principles of anti-bribery and anti-corruption established in "The JSR Group Principles of Corporate Ethics".

Code of Conduct for Gifts and Entertainment

- 1) Whether inside or outside the country, we shall not give gifts to and/or entertain politicians, government officials or other relevant parties in a manner that may generate profits through illegal means or violate bribery regulations.
- 2) When making contributions to political figures/parties or other organizations, we shall do so in a proper manner and observe all applicable laws and regulations, such as the Political Funds Control Law.
- 3) We shall not give or receive gifts and provide or receive entertainment to or from customers, suppliers and other stakeholders, which may be regarded as bribery or unfair acts. We shall not be involved in the exchange of gifts or entertainment that may go beyond the accepted social norms.
- 4) Within the JSR Group, we shall not give and/or receive gifts and/or provide entertainment.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Policies Protection of Whistleblowers

The JSR Group specifies its policies on protection of whistleblower in its "JSR Group's Principles of Corporate Ethics" as below;

Code of Conduct for Providing a Comfortable Work Environment

- 7) In the event that a staff member reports the violation or possible violation of the law and/or the Principles of Corporate Ethics to his/her superiors and/or internal/external hotline, we shall fully protect the said staff member's identity and protect him or her from unfavorable treatment.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Policies against Antisocial Forces

The JSR Group expresses its principles against antisocial forces in "The JSR Group Principles of Corporate Ethics".

Code of Conduct against Antisocial Forces

Our basic policy, upheld by our top executive and company as a whole, is to reject any relation with antisocial forces including any business transactions, and firmly reject any demand with collaboration from police and external organizations specialized in security issues.

The JSR Group Principles of Corporate Ethics, revised in October, 2017.

Information Security Policy

JSR Group endeavors to manage information in an appropriate and secure manner by establishing Information Security Policy and by thoroughly disseminating the policy to its employees.

Information Security Policy

- 1) The JSR Group, by complying with laws and regulations and by observing other social norms relating to the handling of information, will protect information that belong to the JSR Group, its customers, business partners and other third parties.
- 2) The JSR Group will strive to develop and actively use its information assets for the efficient execution of its business. The Group's officers and employees will only use these information assets for the purposes of their work and within the scope of their authority.
- 3) The JSR Group will improve organizations and systems, provide education on information security, thoroughly disseminate this policy and related regulations, and implement measures to ensure information security.
- 4) The JSR Group will implement appropriate human, organizational, and technological measures and work to prevent unauthorized access to information assets from outside the company, as well as leaks, falsification, loss, theft and destruction of information assets.
- 5) If an information security-related problem occurs, the JSR Group will promptly identify the cause and take measures to minimize damage and prevent recurrences.
- 6) The JSR Group will periodically assess and review its information security measures to respond appropriately to changes in external environments.

JSR Group Companies (As of 31st May, 2019)

53 consolidated companies, 17 equity-method affiliates, 1 non-equity-method affiliate, RC reporting scope 18

Japan

Country	Companies' name	Business segment					consolidated companies	equity-method affiliates	RC reporting scope
		Elastomer	Plastics	Digital Solutions	Life Sciences	Others			
Japan	ELASTOMIX CO., LTD.	●					●		※
	Japan Butyl Co., Ltd.	●						◆	
	KRATON JSR ELASTOMERS K. K.	●						◆	
	Emulsion Technology, Co., Ltd.	●					●		※
	Techno-UMG Co., Ltd.		●				●		※
	JAPAN COLORING CO., LTD.		●				●		※
	JSR Micro Kyushu Co., Ltd.			●			●		※
	D-MEC LTD.			●			●		
	JAPAN FINE COATINGS Co., Ltd.			●				◆	
	JSR Life Sciences Corporation				●		●		※
	MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.				●		●		
	LEXI Co., Ltd.				●		●		
	JM Energy Corporation					●	●		※
	JSR Trading Co., Ltd.	●		●	●	●	●		
	JEY-TRANS CO., LTD.					●	●		
	JSR Logistics & Customer Center Co., Ltd.					●	●		※
	JSR ENGINEERING CO., LTD.					●	●		※
	JSR Business Services Co., Ltd.					●	●		
	JN System Partners Co., Ltd.					●		◆	
	Goko Trading Co., Ltd.					●	●		
CMIC JSR Biologics Co., Ltd.				●			-		

Korea, Taiwan, China

Country/Region	Companies' name	Business segment					consolidated companies	equity-method affiliated	RC reporting scope
		Elastomer	Plastics	Digital Solutions	Life Sciences	Others			
Korea	Techno-UMG Hong Kong Co., Ltd.	●						◆	
	JSR Elastomer Korea Co., Ltd.	●						◆	
	JSR Electronic Materials Korea Co., Ltd.			●			●		
	JSR Micro Korea Co., Ltd.			●			●		※
Taiwan	JSR Micro Taiwan Co., Ltd.			●			●		※
China	Tianjin Kuo Cheng Rubber Industry Co., Ltd.	●						◆	
	ELASTOMIX(FOSHAN) CO., LTD.	●					●		※
	JSR (Shanghai) Co., Ltd.	●		●	●		●		
	JSR Trading (Shanghai) Co., Ltd.	●				●	●		
	Techno-UMG Guangzhou Co., Ltd.		●				●		
	Techno-UMG Hong Kong Co., Ltd.		●				●		
	Techno-UMG Shanghai Co., Ltd.		●				●		
	Techno-UMG Shanghai Technical Center Co., Ltd.		●				●		
	JSR Micro (Changshu) Co., Ltd.			●			●		
	J&W Beijing Biotech Co., Ltd.				●		●		
	MBL Beijing Biotech Co., Ltd.				●		●		
	MBL Hangzhou Biotech Co., Ltd.				●		●		

Southeast Asia, South Asia

Country	Companies' name	Business segment					consolidated companies	equity-method affiliated	RC reporting scope
		Elastomer	Plastics	Digital Solutions	Life Sciences	Others			
Indonesia	PT.ELASTOMIX INDONESIA	●					●		※
Vietnam	JSR Trading Vietnam Co., Ltd.					●	●		
Thailand	JSR BST Elastomer Co., Ltd.	●					●		※
	ELASTOMIX (THAILAND) CO., LTD.	●					●		※
	Techno-UMG Asia Co., Ltd.		●				●		
	JSR Trading Bangkok Co., Ltd.	●				●	●		
India	JSR Elastomer India Private Limit	●					●		

Europe

Country	Companies' name	Business segment					consolidated companies	equity-method affiliated	RC reporting scope
		Elastomer	Plastics	Digital Solutions	Life Sciences	Others			
Germany	JSR Elastomer Europe GmbH	●					●		
	Techno-UMG Europe GmbH		●				●		
Hungary	JSR MOL Synthetic Rubber, Ltd.	●					●		
Swiss	Selexis SA				●		●		
Belgian	JSR Micro N.V.			●	●		●		※
	EUV Resist Manufacturing & Qualification Center N.V.			●			●		※

North and Central America

Country	Companies' name	Business segment					consolidated companies	equity-method affiliated	RC reporting scope
		Elastomer	Plastics	Digital Solutions	Life Sciences	Others			
USA	JSR Elastomer America, Inc.	●					●		
	Techno-UMG America, Inc		●				●		
	JSR North America Holdings, Inc.			●	●		●		
	JSR Micro, Inc.			●			●		※
	JSR Life Sciences, LLC					●	●		
	Crown Bioscience International				●		●		
	KBI Biopharma, Inc.				●		●		
	MBL International Corporation				●		●		
Mexico	ELASTOMIX MEXICO, S.A. de C.V.	●					●		
	JSRT Mexico S.A. de C.V.					●	●		



Responsible Care[®]
OUR COMMITMENT TO SUSTAINABILITY

JSR Group CSR Report 2019 Independent Review Report

July 11, 2019

JSR Corporation

To Eric Johnson, Representative Director and CEO

■ Objective of Verification

This verification is performed by the Responsible Care[®] Verification Center with respect to the “JSR Group CSR Report 2019 (Online Version)” (hereinafter, “Report”), with the objective of reporting the opinions of specialists in the chemical industry concerning the following items.

- 1) The reasonableness of the calculation and aggregation methods of performance indices (numerical data) and the accuracy of the numerical data
- 2) The accuracy of provided information other than numerical data
- 3) Responsible Care activities (hereinafter “RC activities”) and CSR activities
- 4) Characteristics of the Report

■ Verification Methodology

- At the Head Office: An inspection concerning the reasonableness of the aggregation method of numerical data reported from each site (office, plant) as well as the accuracy of information other than numerical data. It was conducted by interviewing relevant business managers and Report editors about the Report’s content as well as receiving necessary documents and explanation from relevant business managers and Report editors.
- At the Kashima Plant: An inspection concerning the reasonableness of the methods of calculating numerical data reported to the Head Office and the accuracy of numerical data as well as the accuracy of information provided in the Report. It was conducted by interviewing relevant business managers and Report editors, receiving necessary documents and explanations, checking those documents and explanations against evidence, and making onsite confirmations.
- The numerical data and other information provided in the Report were inspected by sampling.

■ Opinion

- 1) The reasonableness of the calculation and aggregation methods of performance indices (numerical data) and the accuracy of the numerical data
 - The company is making efforts to ensure the accuracy of numerical figures. The Head Office and Kashima Plant are double-checking figures by using an auto-aggregation system (Excel), and domestic Group companies are unifying their data-entry forms to eliminate errors when aggregating and transcribing data.
 - A plan is being prepared to achieve greater efficiency in aggregation work by introducing an environmental information management system. This plan also includes Group companies. Moreover, the digitalization of almost all applications of the Human Resources Development Department is scheduled from October of this year. We expect these efforts to produce results.
- 2) The accuracy of provided information other than numerical data
 - Information provided in the Report is accurate. Some instances of inappropriate expressions and difficult-to-understand text were identified at the drafting stage; however, they all have been corrected in the current report.
- 3) RC activities and CSR activities
 - We positively acknowledge the fact that, under the launch of the new management organization, priority issues in the area of CSR were established in the message by Representative Director, President and COO in order to give shape to the company’s management policy. We also have a high opinion to the point that relevance to the SDGs are noted in each issue of JSR Group’s medium-term CSR Plan.
 - We positively acknowledge the fact that Headquarters Environment and Safety Audits are conducted under the President’s leadership each year and that the company is striving to stimulate employees’ environmental and safety activities through

shifting the audit to the style in which issues faced by JSR plants are shared and discussed and through holding dialogues and “sharing of ideas” between top management and employees.

- Additionally, we positively acknowledge the fact that each year the company organizes CSR and RC explanatory briefings through which officers and managers in charge visit each business site to share results, issues and other matters concerning CSR advancement and RC activities with employees and discuss those matters directly with them.
- We positively acknowledge the fact that the Kashima Plant is vigorously implementing a project to prevent external corrosion and leaks in piping caused by the region’s particular sea wind and that the project is producing affirmative results. We further positively acknowledge the fact that the plant is conducting analyses toward preventing recurrence of accidents, identifying root causes, and taking countermeasures.

4) Characteristics of the Report

- We positively acknowledge the fact that, in the section on Dialogue with Stakeholders, the company discloses and publishes the information that it holds dialogues with experts concerning the identification and validity of its materiality, under the theme “JSR Group’s Materiality and the SDGs” as a step in formulating its next mid-term business plan, which is scheduled to start in FY2020.



Shigeki Nagamatsu
Chief Director, Responsible Care Verification Center
Japan Chemical Industry Association