

JSR Group Business and Other Risks

JSR Group is exposed to the following risks that may impact on operating results, financial position, cash flows, and other aspects of its business performance.

Forward-looking statements are based on the Group's judgments as of March 31, 2022, and the Group's business and other risks are not limited to the following matters.

Risks Related to Business Strategies

Risk	Description	Risk Mitigation Measures
(1) Changes in Demand due to Economic Trends	Major industries in which JSR Group's products are sold, such as automobiles and electronics, may be influenced by the economic climate in countries or regions. An economic slowdown could reduce demand in these industries and adversely affect JSR Group's operating results.	JSR endeavors to mitigate risks by striving for a stable business composition, through, for example, enhancing the Life Sciences Business, as well as increasing highly functional, high-added-value product lines in each business segment and rearranging portfolios within businesses.
(2) Fluctuations in Exchange Rates	JSR Group is susceptible to the effects of exchange rate fluctuations. Operating results of consolidated subsidiaries and equity-method affiliates located in other countries are converted into Japanese yen amounts for the purposes of preparing consolidated financial statements. Accordingly, yen appreciation could adversely affect JSR Group's operating results.	As JSR Group exports products and imports goods such as raw materials in foreign currencies, the Group takes steps to reduce risks such as entering into forward exchange contracts.
(3) Fluctuations in Prices for Crude Oil, Naphtha, and Other Major Raw Materials	Fluctuations in prices for crude oil and naphtha, or changes in market conditions for other major raw materials, could change procurement prices of raw materials or market conditions for products and adversely affect JSR Group's operating results, especially in the Plastics Business.	JSR strives to minimize the effects of fluctuations in raw material prices with such strategies as lowering cost prices or passing on price changes in selling prices as well as securing multiple sources for raw materials.
(4) Overseas Operations	Overseas operations are exposed to a number of risks that include, but are not limited to, an unfavorable political environment or economic trends; labor disputes and other problems due to differences in labor laws and other working conditions; difficulty in recruiting and retaining employees; an adverse impact on business activities due to inadequate social infrastructure; and the impact of wars, terrorism, and other social instability. Any of these events could adversely affect JSR Group's operating results.	To ensure the continuation or early recovery of key business activities in the event of a country risk or other major event, JSR Group, led by the Risk Management Committee, manages activities to be performed in ordinary times as well as decision criteria and action guidelines for business continuity in emergencies and invokes business continuity plans (BCPs) and deliberates on responses in an emergency event.

Risk	Description	Risk Mitigation Measures
(5) Product Quality Assurance and Product Liability	Damage or injury caused by a product manufactured by JSR Group could adversely affect JSR Group's operating results.	Damage or injury caused by a product manufactured by JSR Group could adversely affect JSR Group's operating results. JSR Group strives to ensure data integrity recognizing its importance.
(6) Development of New Products	Large, unforeseen changes in the industry or market could prevent the timely development of new products and adversely affect JSR Group's operating results.	JSR Group sets research themes that anticipate market needs and endeavors to arrange and enhance flexible research structures able to respond quickly to user conditions. Because rapid technological progress is taking place, especially in the electronics and life science industry, JSR is constantly working on developing state-of-the-art materials in line with technological innovations.
(7) R&D Involving Next-Stage Growth Businesses	JSR Group actively invests in R&D to create next-stage growth businesses. However, there is no guarantee that all R&D activities will yield worthwhile results. Depending on R&D results, there could be an adverse effect on JSR Group's operating results.	JSR Group engages in joint research and open innovation with universities and research institutions worldwide — such as the JSR-Keio University Medical and Chemical Innovation Center (JKiC), the JSR Bioscience and informatics R&D Center (JSR BiRD), etc — to accelerate R&D in new fields and to improve success probabilities.
(8) Protection of Intellectual Property	Disputes over intellectual property with other companies could arise or infringements on JSR's intellectual property by other companies could occur.	Protection of intellectual property is extremely important for JSR Group's business development. JSR has established structures for protecting its intellectual property under which it takes protective measures.
(9) Climate Change	As a transition risk associated with climate change, if policies toward a decarbonized society are strengthened or laws and regulations related to carbon emissions are revised or newly enacted at an unexpectedly rapid pace in various countries and regions in the future, the Group may face increased expenditures for such efforts and restrictions on its business activities.	JSR Group began activities to use energy in its production process more efficiently in the 1990s following growing worldwide interest to address climate change. In October 2020, JSR endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and committed to a target of net-zero greenhouse gas emissions by FY2050. We are now working to further reduce our greenhouse gas emissions through the introduction of higher efficiency equipment and use of renewable energy, in addition to energy conservation activities.

Risks Associated with Business Operations

Risk	Description	Risk Mitigation Measures
(10) Environmental Issues	In the event that a spill of any type of chemical occurs or that environmental regulations become more stringent, the Group's business activities could be constrained, the Group may have to pay compensation and other costs, or the Group may have to make new substantial capital expenditures. Any of these events could adversely affect JSR Group's operating results.	Positioning environmental protection as an important management policy, JSR Group complies with all laws and regulations concerning the environment. The Group also takes actions aimed at lowering its environmental impact, reducing and eliminating waste materials, conserving energy and resources, and biodiversity conservation etc.
(11) Laws and Regulations	In the countries where it operates, JSR Group is subject to various laws and regulations involving business and investment permits, import and export activities, trade, labor relations, intellectual property, taxes, foreign exchange, and other matters. In the event that a law or regulation is violated, or a law or regulation becomes stricter or is significantly altered, there could be limitations to the Group's business activities or additional compliance costs. Any of these events could adversely affect JSR Group's operating results.	JSR Group routinely gathers information on each country's laws and regulations that relate to its business and takes necessary compliance actions. The Group in particular monitors changes in countries' environment-related laws and ordinances, product safety and quality regulations, and laws and ordinances related to imports and exports.
(12) Litigation	JSR Group may be sued or be involved in other litigation concerning a dispute with a supplier, customer, or other external party. The outcome of significant litigation could adversely affect JSR Group's operating results.	JSR Group strives to prevent disputes through compliance with laws and ordinances related to its business, proper acquisition of intellectual property rights, clarification of contract terms, and other measures to mitigate risks. The Group has also formed links with law offices in various countries and established structures to respond to litigation and similar matters.
(13) Procurement of Raw Materials	An interruption in the supply of raw materials due to an accident at a raw materials manufacturer or a supply stoppage due to quality issues or bankruptcy could hinder production activities and adversely affect JSR Group's operating results.	JSR Group ensures stable raw material procurement operations by securing multiple sources for raw materials.

Risk	Description	Risk Mitigation Measures
(14) Information Systems and Information Management	Unauthorized access due to cyber attacks, malicious or grossly negligent actions by employees or others, power outages, disasters, or other events, may result in the falsification or destruction of data, leakage of personal information, failure of information systems, which could in turn impede business activities.	JSR strives to prevent this risk from materializing using software, implementing security countermeasures against crises, and regularly providing education and training drills to employees.
(15) Natural Disasters and Accidents	Constraints on economic activity caused by a major natural disaster or an accident at a manufacturing facility that damages a manufacturing facility or disrupts production could adversely affect JSR Group's operating results.	All JSR Group manufacturing facilities have established countermeasures for accidents based on the identification of all potential sources of risk and conduct periodic inspections of their facilities. The Group works continually on safety measures with regard to earthquakes and other natural disasters. JSR's main production facility, the Yokkaichi Plant, houses private power generation equipment, and the Kashima Plant is able to access electric power from shared power generation facilities when necessary.
(16) Spread of COVID-19 Infections	Restriction of economic activities due to the spread of the COVID-19 infections, temporary closure of offices and factories, or reduced operation could adversely affect the JSR Group's business results.	JSR is implementing thorough measures to stop the spread of infection at our offices and plants. JSR is also working to further fortify its financial base ahead of sudden changes in management environment by maintaining its supply chains and organizational strengths for ensuring business continuity and stable management, even during a crisis.