

# Risk Management

## Risk Management Structure

Our Group's risk management structure is described below.

### ● Sustainability Promotion Committee

We have established the Sustainability Promotion Committee as the parent body for conducting our Group's sustainability activities on a continuous, Group-wide basis. It approves the policies, plans, results, items, and figures to be published externally by the Risk Management Committee, which is a subordinate committee, and reports that information to the Board of Directors.

### ● Risk Management Committee

The Risk Management Committee identifies major risks that could have a serious impact on our business performance, confirms the validity of response measures to major risks, and gives instructions on what additional measures should be considered to our departments that oversee risk and each business division. The members of the Risk Management Committee consist of the President, Senior Executive Officers in charge of business and corporate divisions, and the heads of departments that oversee risk. For information about activities of the Risk Management Committee, see [“Detailed Data Related to Sustainability \(Governance\) > Risk Management.”](#)

### ● Divisions That Oversee Risk

When it comes to risk oversight, the departments that oversee risk draft and promote response measures for our Group as a whole by coordinating with each business division. These departments that oversee risk include the Corporate General Affairs Division, Personnel Division, Corporate Finance & Planning Division, Production Management & Engineering Division, Research & Development Division, IT Promotion Division, and Global Procurement Division.

### ● Each Business Division

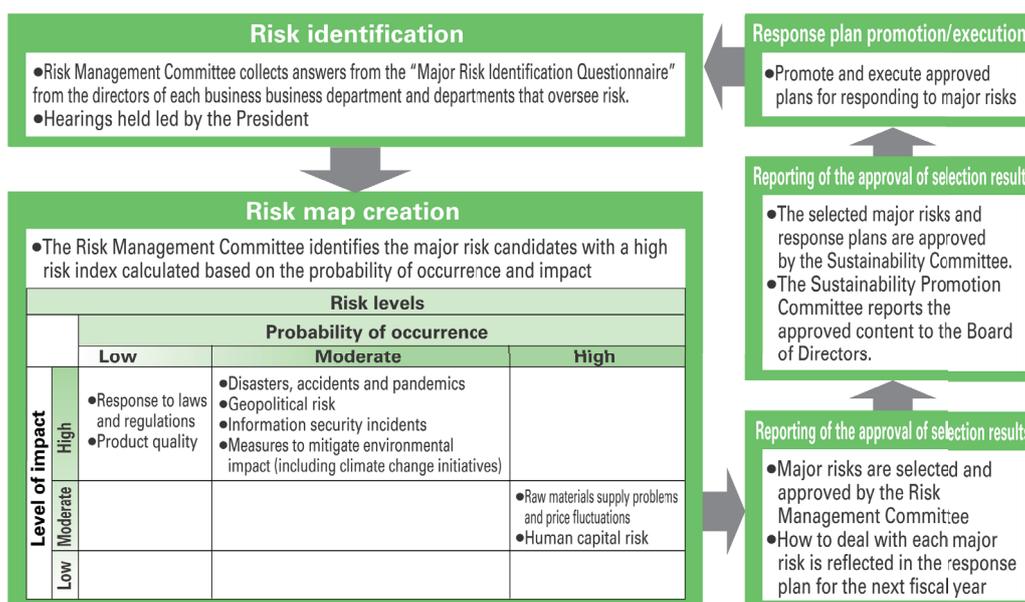
As part of their original business operations, the Group's sales departments, plants, R&D departments, and other business divisions take various measures to properly manage the risks associated with the execution of their own business operations.

In addition to the above, the Group has established a corporate governance system and has developed and operated an internal control system, including risk management as described [“Corporate Governance.”](#)



## Major Risk Selection and Approval Process

The selection and approval of major risks in the Group is conducted once a year. The process is as follows.



### ● Guidelines for Selecting the Degree of Probability of Occurrence

| Levels                             | Guidelines for selecting the level of probability of occurrence |
|------------------------------------|---|
| Probability of occurrence Low      | Approximately once every 100 years to once every 10 years       |
| Probability of occurrence Moderate | Approximately once every few years to once every year           |
| Probability of occurrence High     | Twice or more each year   |

### ● Guidelines for selecting level of impact

| Levels                   | Guidelines for selecting the level of impact (If more than one of the following applies, select the item with the highest level of impact) |  |   |   |
|--------------------------|--|--|---|---|
|                          | Monetary impact  | Human life   | Reputation  | Impact on operations  |
| Level of impact Low      | to ¥50 million   | Injuries or illnesses requiring medical attention occur                    | Resolved through routine daily management   | Affects operations for a few days at one location only  |
| Level of impact Moderate | ¥50 million to ¥1.0 billion  | Injuries or illnesses requiring hospitalization occur                      | Minor coverage (in a negative way) in conventional and online mass media Trust is partially diminished among business partners and consumers    | Affects operations for several weeks at one location only<br>Affects operations for multiple days at multiple locations   |
| Level of impact High     | ¥1.0 billion -   | One or more deaths occur<br>Numerous cases of injury and/or sickness occur | Major coverage (in a negative way) in conventional and online mass media Trust is considerably diminished among business partners and consumers | Affects operations for several months at one location only<br>Affects operations for multiple weeks at multiple locations |

## Major Risk Content, Potential Impacts, and Responses

Based on the above-mentioned major risk selection process, the Group has identified the following major risks that could have a significant impact on the Group's business, and by viewing these as opportunities and promoting responses, the Group will create value in the future.

The 8 major risks selected in FY2024 that must be addressed in FY2025 are: (1) disasters, accidents, and pandemics, (2) geopolitical risk, (3) information security incidents, (4) measures to mitigate environmental impact (includes climate change), (5) compliance with laws and regulations, (6) product quality, (7) raw materials supply problems and price fluctuations, and (8) human capital risk.

Of these, the risks associated with climate change are (1) disasters, accidents and pandemics, (4) measures to mitigate environmental impact (including responses to climate change), (5) compliance with laws and regulations, and (7) raw material supply problems and price fluctuations.

| Risks   | Details and potential impacts of risks | Responses and opportunities |                           |          |                 |      |   |   |
|---|--|-----------------------------|---------------------------|----------|-----------------|------|---|---|
| <p><b>Disasters, accidents, and pandemics</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Undetermined</td> </tr> <tr> <td>Probability of occurrence</td> <td>Moderate</td> </tr> <tr> <td>Level of impact</td> <td>High</td> </tr> </table> <p>🔗 <a href="#">Business Continuity Plan (BCP)</a></p>          | Time frame                             | Undetermined                | Probability of occurrence | Moderate | Level of impact | High | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Earthquakes, explosions, fires, storm and flood damage, and pandemics</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Impediments to product supply due to personal injury to neighbors and employees, damage to plant/equipment, or disruptions of electricity, gas, water, or telecommunications services, and impediments to continued business activities due to supply chain disruptions</li> <li>● Claims for substantial damage, etc.</li> </ul>  | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Formulation of a BCP, annual validation of countermeasures, revision of BCP and ongoing training</li> <li>● Implementation of measures for reduced production and continuity assurance by securing adequate inventories, establishing redundancy with our production systems, and augmenting spare parts supplies</li> <li>● Elucidate causes, formulate countermeasures, and deploy countermeasures throughout the Group to prevent explosions and fires, and continue operating the predictive management system for abnormalities</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Expansion and continuation of transactions with customers through improved BCP response</li> </ul>  |
| Time frame  | Undetermined                           |                             |                           |          |                 |      |   |   |
| Probability of occurrence   | Moderate                               |                             |                           |          |                 |      |   |   |
| Level of impact   | High                                   |                             |                           |          |                 |      |   |   |
| <p><b>Geopolitical risk</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Undetermined</td> </tr> <tr> <td>Probability of occurrence</td> <td>Moderate</td> </tr> <tr> <td>Level of impact</td> <td>High</td> </tr> </table>  | Time frame                             | Undetermined                | Probability of occurrence | Moderate | Level of impact | High | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Suspension of import/export transactions or settlement of funds due to strengthened economic security policies in each country; outbreak of wars and conflicts</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Criminal penalties, administrative penalties, civil lawsuits, and loss of trust due to inability to respond to unforeseeable changes</li> <li>● Impediments to business continuity due to threats to employee lives and assets, or disruption of logistics, procurement, or infrastructure</li> </ul> | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Collection of information from experts and government agencies to prepare or enhance the effectiveness of risk management manuals at overseas sites</li> <li>● Collection of information about import/export control and economic sanctions, and utilizing multi-fabrication and multi-sourcing to reduce or minimize impacts</li> </ul>   |
| Time frame  | Undetermined                           |                             |                           |          |                 |      |   |   |
| Probability of occurrence   | Moderate                               |                             |                           |          |                 |      |   |   |
| Level of impact   | High                                   |                             |                           |          |                 |      |   |   |
| <p><b>Information security incidents</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Undetermined</td> </tr> <tr> <td>Probability of occurrence</td> <td>Moderate</td> </tr> <tr> <td>Level of impact</td> <td>High</td> </tr> </table> <p>🔗 <a href="#">Information Security</a></p>                         | Time frame                             | Undetermined                | Probability of occurrence | Moderate | Level of impact | High | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Principal systems failure or stoppage, or leakage of confidential information held by our Company due to cyber attack</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Loss of trust, disorder or disruption of business activities, and costs incurred for compensating business partners, etc.</li> </ul>   | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Establishment of cross-organizational body "SUMIBE-CSIRT," and of a framework for coordination of response between management and external organizations in times of emergency</li> <li>● Implementation of measures such as improving vulnerability response, detecting risks through the introduction of remedial products, security evaluations conducted by external organizations, and constantly monitoring against cyber-attacks</li> <li>● Strengthening prevention and promoting awareness through regular information security education for all Directors, Officers, and employees in Japan and abroad</li> <li>● Promotion of acquisition of Registered Information Security Specialist certification to improve the skill sets of our information security staff, and deploy and train information security personnel for work at overseas sites</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Expansion and continuation of transactions with customers by maintaining and improving the information security management system</li> </ul> |
| Time frame  | Undetermined                           |                             |                           |          |                 |      |   |   |
| Probability of occurrence   | Moderate                               |                             |                           |          |                 |      |   |   |
| Level of impact   | High                                   |                             |                           |          |                 |      |   |   |
| <p><b>Measures to mitigate environmental impacts</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Medium- to long-term</td> </tr> <tr> <td>Probability of occurrence</td> <td>Moderate</td> </tr> <tr> <td>Level of impact</td> <td>High</td> </tr> </table> <p>🔗 <a href="#">Environmental Management</a></p> | Time frame                             | Medium- to long-term        | Probability of occurrence | Moderate | Level of impact | High | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Climate change issues (strengthening greenhouse gas emissions regulations, carbon pricing, etc.)</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Exclusion from markets due to delay of countermeasures</li> </ul>   | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Acceleration of efforts to reduce greenhouse gas emissions (Targets for 2030: reduce Scope 1+2 emissions by 48% and Scope 3 emissions by 25% compared to FY2021) by expanding the switch to electricity from renewable energy sources, expanding the introduction of solar power systems, promoting actions to improve process efficiency, and working with our supply chain to reduce emissions</li> <li>● Proactive participation in industry projects, and programs linking industry, academia, and government, as well as development of the innovative technologies needed to reduce environmental impact</li> <li>● Efforts to achieve SDG-contributing product sales revenue ratio targets</li> <li>● Scenario analysis of our key business areas by TCFD Task Team</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Increased demand for SDG-contributing products</li> </ul>   |
| Time frame  | Medium- to long-term                   |                             |                           |          |                 |      |   |   |
| Probability of occurrence   | Moderate                               |                             |                           |          |                 |      |   |   |
| Level of impact   | High                                   |                             |                           |          |                 |      |   |   |

|  |                      |                      |                           |      |                 |          |  |   |
|--|----------------------|----------------------|---------------------------|------|-----------------|----------|--|---|
| <p><b>Compliance with laws and regulations</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Undetermined</td> </tr> <tr> <td>Probability of occurrence</td> <td>Low</td> </tr> <tr> <td>Level of impact</td> <td>High</td> </tr> </table> <p>➤ <a href="#">Compliance</a></p>   | Time frame           | Undetermined         | Probability of occurrence | Low  | Level of impact | High     | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Significant changes to laws and regulations that are closely connected to the business activities of our Group as a manufacturer of functional chemical products</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● New costs for measures to deal with changes in laws and regulations</li> <li>● Loss of trust, or major losses due to criminal penalties, surcharges, and civil litigation when laws or regulations are violated</li> </ul>   | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Minimization of the risks of compliance violation, promotion of development of a compliance system, and promotion of awareness of compliance by the Compliance Committee</li> <li>● Development of systems by individual departments that oversee risk, implementation of education, guidance and support to business divisions, and monitoring by internal auditing departments</li> <li>● Risk reduction through the operation and maintenance of management systems that can stay up to date with the latest chemical substance regulations in each country</li> <li>● Operation of a Compliance Reporting System that allows not only directors, officers, and employees but also stakeholders to report issues</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Expansion and continuation of transactions with customers by complying with laws and regulations, establishing compliance systems, and maintaining and improving operations</li> </ul> |
| Time frame   | Undetermined         |                      |                           |      |                 |          |  |   |
| Probability of occurrence  | Low                  |                      |                           |      |                 |          |  |   |
| Level of impact  | High                 |                      |                           |      |                 |          |  |   |
| <p><b>Product quality</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Undetermined</td> </tr> <tr> <td>Probability of occurrence</td> <td>Low</td> </tr> <tr> <td>Level of impact</td> <td>High</td> </tr> </table> <p>➤ <a href="#">Product Liability/Quality Assurance</a></p>   | Time frame           | Undetermined         | Probability of occurrence | Low  | Level of impact | High     | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Large-scale product incidents</li> <li>● Advancement of quality control standards required by customers after launch due to advances in science and technology and changes in customer markets and usage methods</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Negative effects on business performance due to loss of trust, ma or costs due to recalls, compensation for damage, etc.</li> <li>● Occurrence of unforeseeable quality problems due to advancement of quality management standards</li> </ul>   | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Creation of a product quality management framework that is consistent from design management to manufacturing and sales, and adheres to manuals compliant with international quality management standards</li> <li>● Annual verification of quality management status by qualified experts, and identification of potential quality risks and mitigation response using FMEA and FTA</li> <li>● Elimination of human variables and enhancement of traceability using AI/IoT technology at major domestic plants, and expansion to main overseas plants</li> <li>● Establishment of a system that can centrally manage quality issues that occur at all domestic and overseas business sites, and verification of effectiveness of response/measures to address quality issues</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Expansion and continuation of transactions with customers by maintaining and improvinq quality control systems</li> </ul>    |
| Time frame   | Undetermined         |                      |                           |      |                 |          |  |   |
| Probability of occurrence  | Low                  |                      |                           |      |                 |          |  |   |
| Level of impact  | High                 |                      |                           |      |                 |          |  |   |
| <p><b>Raw materials supply problems and price fluctuations</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Short-term</td> </tr> <tr> <td>Probability of occurrence</td> <td>High</td> </tr> <tr> <td>Level of impact</td> <td>Moderate</td> </tr> </table> <p>➤ <a href="#">Sustainable Procurement</a></p>                             | Time frame           | Short-term           | Probability of occurrence | High | Level of impact | Moderate | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Withdrawal from business by raw material manufacturers due to reconsideration of business portfolio</li> <li>● Geopolitical factors such as conflicts in various regions and supply problems caused by natural disasters</li> <li>● Supply concerns stemming from the 2024 logistics problem, revisions to laws and regulations, and tighter environmental regulations</li> <li>● Increase in raw material prices due to the weak yen and interlocking of prices in the crude oil and nonferrous metals markets</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Declining sales, deteriorating profitability, and hindrance to business continuity</li> </ul> | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Risk reduction through procuring important raw materials from multiple sources, ensuring adequate inventories, etc.</li> <li>● Implementation of BCP measures and planning for suppliers of important raw materials in Japan; Working to ensure the availability of substitute products and safety inventory for suppliers of important raw materials in the Europe and North America and China</li> <li>● Confirmation of BCP measures when new raw materials are adopted, and risk reduction by setting a standard of adoption that ensures materials do not contain prohibited substances</li> <li>● Application of the formula system for principal raw materials (automatically reflecting raw material price fluctuations in product prices)</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Expansion and continuation of transactions with customers through improved BCP response</li> </ul>  |
| Time frame   | Short-term           |                      |                           |      |                 |          |  |   |
| Probability of occurrence  | High                 |                      |                           |      |                 |          |  |   |
| Level of impact  | Moderate             |                      |                           |      |                 |          |  |   |
| <p><b>Human capital risk</b></p> <table border="1"> <tr> <td>Time frame</td> <td>Medium- to long-term</td> </tr> <tr> <td>Probability of occurrence</td> <td>High</td> </tr> <tr> <td>Level of impact</td> <td>Moderate</td> </tr> </table> <p>➤ <a href="#">DE&amp;I</a></p> <p>➤ <a href="#">Employment and Human Resource Development</a></p> | Time frame           | Medium- to long-term | Probability of occurrence | High | Level of impact | Moderate | <p><b>Details</b></p> <ul style="list-style-type: none"> <li>● Inability to secure and maintain the necessary human resources due to the decline in the labor force caused by the declining birthrate and aging population</li> <li>● Inability to flexibly manage organizations in an era where making future predictions is difficult</li> <li>● Inability to secure the human resources necessary to promote digital transformation</li> <li>● Suspension, stagnation, and delay of important operations due to the turnover of key personnel/talented employees and recruitment delays</li> </ul> <p><b>Impacts</b></p> <ul style="list-style-type: none"> <li>● Obstruction of business continuity</li> </ul>                                     | <p><b>Responses</b></p> <ul style="list-style-type: none"> <li>● Creation of innovation through the active participation of diverse human resources through the promotion of DE&amp;I</li> <li>● Enhancement of management education and expansion of education using 360° assessment to strengthen management-level leadership and improve individual and organizational performance</li> <li>● Promotion of hybrid recruitment (new graduate and mid-career hires)</li> <li>● Expansion of education courses related to data science utilization and digital transformation promotion, introduction of an in-house certification system for data scientists, and development of human resources capable of using data through various types of education</li> <li>● Implementation of necessary measures based on the analysis results of the engagement survey to improve employee engagement and performance</li> </ul>   |
| Time frame   | Medium- to long-term |                      |                           |      |                 |          |  |   |
| Probability of occurrence  | High                 |                      |                           |      |                 |          |  |   |
| Level of impact  | Moderate             |                      |                           |      |                 |          |  |   |

The major risks listed above are not an exhaustive list of all risks faced by our Group, as other are other risks that are difficult to foresee. Please also refer to the Securities Report for information on individual risks and how we handle them, as well as opportunities.

➤ [Securities Report \(Japanese language\)](#)

## Business Continuity Plan (BCP)

Of the foreseeable disasters and accidents that could occur, we regard earthquakes; explosions, fires, and leaks; storm and flood damage; and pandemics as major emergencies. We prepare BCP designed to ensure the continuity of business when such emergencies occur, and share these with our clients as needed. Thus far, we have implemented measures such as ensuring adequate inventories of products and raw materials, ensuring redundancy with our production systems, augmenting our supplies of spare parts, and systematizing our restoration structures. With the cooperation of our suppliers, we are also confirming BCP upstream in the supply chain and examining additional countermeasures, while expanding the introduction of a predictive management system for abnormalities based on AI and IoT technologies as a preventive measure against fires and explosions that could occur in our Group.

Our response to COVID-19 has included the establishment of a COVID-19 Emergency Taskforce and a countermeasures secretariat at our head office, which operated flexibly as we deliberated measures to be taken in response to the state of the contagion, such as issuing notices as appropriate. We also consider the operation of these two bodies in revising our Companywide COVID-19 Infection Countermeasures Manual as needed. We also referred to this manual in our work of formulating a response framework and action plan for each of our subsidiaries in consideration of the differences in laws, regulations, and industry rules for the country in which each was located.

We recognize that the frequency with which disasters and incidents that we regard as major emergencies occur, as well as the magnitude and extent of their impacts, is changing every year as a result of advances in science and technology and the effects of climate change. As such, every year we verify the adequacy of our BCPs based on the latest information. Moving forward, we will continue to reassess our BCPs and provide training.