

People

Corporate Statements

The Kuraray Group
Code of Conduct

TOP STATEMENT

Sustainability Long-term
Vision and Sustainability
Medium-term Plan

Materiality of Kuraray
Group

Planet

Product

People

Occupational Safety
and Process Safety

Activities at
Workplaces

Interaction with
Society

Sustainability
Medium-term Plan
for People

Governance

GRI Standards
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Kuraray Report
(integrated report) /
Sustainability website

Initiatives, etc.

People priority measures in the Sustainability Medium-Term Plan

People			Benchmarks	2024	2026
	Occupational Injury	A, B rank injuries ※1	2021:3cases	0 case	0 case
		Frequency rate of all occupational injuries ※2	2021:2.89	1.7 or less	1.3 or less
	Process Accident	A, B, C rank accidents ※3	2021:3cases	0 case	0 case
		D1, D2 rank accidents ※3	2021:7cases	3 cases or less	3 cases or less
	Diversity and Inclusion	Global measures	—	• Human resource development from a long-term perspective and promotion of global mobility • HR measures to promote diversity (personnel database, personnel recruitment, etc.)	
		Ensuring Diversity of Core Human Resources (Japan)※4	End of September 2021:12%	16%	20%

Result in 2022 and Target in 2023

People			Result in 2022	Evaluation in 2022	Target in 2023
	Occupational Injury	A, B rank injuries ※1	5 cases	target not achieved(0 case)	0 case
		Frequency rate of all occupational injuries ※2	2.40	target not achieved(2.0 or less)	1.9 or less
	Process Accident	A, B, C rank accidents ※3	5 cases	target not achieved(0 case)	0 case
		D1, D2 rank accidents ※3	3 cases	target achieved(3 case or less)	3 cases or less
	Diversity and Inclusion	Global measures	Human resource development from a long-term perspective and promotion of global mobility HR measures to promote diversity (personnel database, personnel recruitment, etc.)		
		Ensuring Diversity of Core Human Resources (Japan)※4	13%	target achieved (13%)	14%

※ 1 Evaluation ranking of occupational injuries using Kuraray's proprietary system. Four ranks in order of seriousness: A > B > C > D.

※ 2 Frequency rate of all occupational injuries: Number of all occupational injuries (lost-time and no losttime injuries) per million working hours.

※ 3 Evaluation ranking of process accidents using Kuraray's proprietary system. Five ranks in order of seriousness: A > B > C > D1 > D2.

※ 4 Japan excluding Production sites

Occupational Safety and Process Safety

Activities at Workplaces

Interaction with Society

Sustainability Medium-term Plan for People

Kuraray's Approach to Safety

For the Kuraray Group's business activities, safety is an absolute necessity, and the cornerstone of everything we do. Building "Trustful workplaces and a safe and accident-free company" is a key theme required for maintaining stable product supply and trustworthiness for society.

With these concepts in mind, the Kuraray Group has established and implemented a safety management system to undertake various activities. A number of initiatives are being promoted to raise the safety awareness of our employees and to have safety behavior and confirmations established as common practice at work.

At each workplace, we uncover risks related to occupational safety and process safety, conduct thorough risk assessment activities, promote fundamental equipment safety measures, and prevent process accidents and occupational injuries. Additionally, to prepare for the event of an accident or injury, we are carrying out training to minimize damage, sharing information on cases of accidents and lessons learned, and horizontally deploying countermeasures.

**Safety is the
Cornerstone of
Everything We Do**

1. Ensure and Practice Safety First, Production (Construction, R&D) Second
2. Ensure and Practice that Predict Hazards and Make Sure the Safety Before Taking Action and Confirm If the Action Results are What You Expected
3. Each Employee Should Think of Safety as “Their Own Issue” and Act Accordingly

Safety Activity Management

In accordance with the Company's Safety Activity Management Regulations, the Kuraray Group develops a safety plan every fiscal year and implements it to ensure occupational safety and process safety. At the Safety Promotion Committee attended by the President and executives in charge, we make an overall assessment and have a discussion on safety activity performances of the current fiscal year and establish an activity policy for the coming fiscal year. This policy is reflected in and implemented through specific action plans of each plant and department. A group of safety representatives from headquarters, including executives in charge of safety, visit every plant of the Group in Japan twice a year to examine their management of implementation progress. In addition, staff members from headquarters visit the Group subsidiaries outside Japan once every three years to confirm their status as well as conduct examinations via remote conferencing. * We perform an overall assessment of results based on the issues found through the surveys made at each plant, the safety results for that year, and other factors. We incorporate this assessment into the formulation of company-wide policies for the next year, thereby operating a management system for safe operations.

*From 2020 to 2022, the verification of safety activities was conducted via web meeting remotely due to the COVID-19 situation.



Verification of safety activities at
Saijo Plant



Verification of safety activities at
Niigata Plant

Priority Activities for Occupational Safety, Process Safety

2022		Safety Activities in 2023
Activity	Performance	

2022		Safety Activities in 2023
Activity	Performance	
Ensuring basic safety actions to secure the safety of the workplace	We believe our efforts to instill the habits of “predicting hazards” and “making sure the safety” have been conducive to some extent. However, the degree of practice in the workplace have taken root varies. Cases of accidents and injuries caused from the skipping of basic actions continued to occur. Continuous efforts are needed to enable every employee to perform basic safety actions in every situation.	<ul style="list-style-type: none"> • Practice basic safety actions to ensure the safety of the workplace • Understand actual state of work s and work environment , consider risks of the works, and improve the situation from both perspective of soft measures and hard measures • Discover potential risks of process safety, consider countermeasures, and implement measures to minimize realized risks • Ensure safety of construction and maintenance works • Improve overseas chemical plants’ safety management level
Understanding the conditions of work in the workplace and improvements it both in tangible and intangible initiatives	We grasped risks in the workplace and improved of these risks from activities such as “5S” activities to better organize workplaces, activities to share “awareness” discovered in the workplace and reviewing the operation standards. We continue to engage with issues such as the identification of residual risks from the working tasks and conditions in the workplace and further practice of the reviewed operation standards in the workplace.	
Identification of potential risks and consideration of countermeasures, and implementation of measures to minimise apparent risks in terms of process safety	We have continued to identify risks and to explore countermeasures from the viewpoint of unusual tasks and conditions. We are also working on training to respond to accidents. We need to continue to conduct activities to identify and discover risks of process safety, and explore countermeasures, while clarifying previously unpredicted latent risks individually.	
Ensuring safety in construction and maintenance work	To ensure safe construction and maintenance work, we review systems and regulations and provide training. In particular, we implement safety measures in advance to provide safe workplaces, on-site, in-situ tripartite checks, and appropriate communication of information. However, on-site workers are still injured due to inadequate provision of safe workplaces. It is necessary to ensure that the rules for ensuring safety are operational and practised on site.	

2022		Safety Activities in 2023
Activity	Performance	
Grasping the level of process safety management at overseas chemical plants	For issues identified from the results of safety audits for chemical plants outside Japan, we are working on constructing and improving process safety management systems for each production site. We are also identifying latent hazards through risk assessments, informing employees, and implementing countermeasures. And we have introduced activities such as safety meetings to improve communication with our overseas groups. In addition, we have formed a new in-house team of process safety management (PSM) experts with the aim of understanding and supporting the level of safety management at each of our overseas sites.	

Process Safety

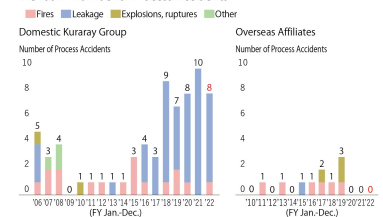
At the Kuraray Group, we consider it our major responsibility to prevent the occurrence of explosions or fires, leakage of hazardous materials and other accidents that could have an immense impact on society, as well as to minimize any damage in the event of such occurrence. For this purpose, we have continuously undertaken activities such as risk assessment related to process safety, and strive to take earthquake and tsunami countermeasures for buildings and plants, and organize the safety management system for facilities.

After accidents occurred at another company in the 2010s, we paid particular attention to the risk assessment of unusual tasks and situations such as the starting and ceasing of an operation, a power and water outage, and an emergency shut-down. Moreover, we also extract various risks that may arise in the event of a failure of safety equipment or incompliance with standard procedures or rules, and consider countermeasures.

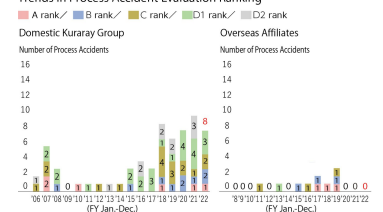
Additionally, we develop ideas and human resources that can promptly respond to an unusual situation before an accident occurs through implementing education to raise the members' sensitivity to risks and clarify standards to determine an unusual situation, so that they can detect any sign of abnormalities.

Employees are regularly trained through on-site drills on various situations including the night time, holidays, when managerial personnel are absent and situations that occur without notice, in a drill using an external facility or a joint

Trends in Number of Process Accidents



Trends in Process Accident Evaluation Ranking



drill with a local fire department.

We are engaging in initiatives for receiving evaluations from an external organization about our safety-related foundations and culture, and we aim to be a safe company that does not suffer any accidents by operating the PDCA cycle with a thorough understanding of which areas need further reinforcement.

In the event of a significant accident, an Emergency Command Center led by President is ready to be established to promptly respond to the situation and provide on-site support. Media training is also provided to key managerial personnel in charge of public relations to enable them to appropriately provide information to the regional community and media in case of such an accident.

In 2022, there were seven leakage accidents of hazardous materials or high-pressure gas and one small-scale fire occurred in the Kuraray Group in Japan. Five cases were relatively serious (A, B, and C rank) process accidents, for which our target is zero cases. Three cases were minor (D1 and D2 rank, e.g., a very small amount of hazardous materials leaked), for which our target is 3 or less cases. We will continue to promote risk identification and countermeasures to aim for zero major process accidents and to reduce the number of minor process accidents.

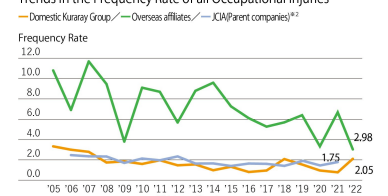
In addition, while continuing the safety audits for overseas chemical plants that began in 2019, we formed a new team of global experts in Process Safety Management (PMS) and commenced activities in 2022. We will thoroughly prevent recurrence of process accidents and work to improve safety control level by addressing issues brought to light by the audits.

Occupational Safety

Realizing that the safety and health of its employees are the basis of business activities, the Kuraray Group aims to create safe and injury free workplaces by striving to enhance the safety level of each of its employees and organizations. It does this through appropriately implementing its safety activity management system.

Through Group-wide policies and activity items including

Trends in the Frequency Rate of all Occupational Injuries^{*1}



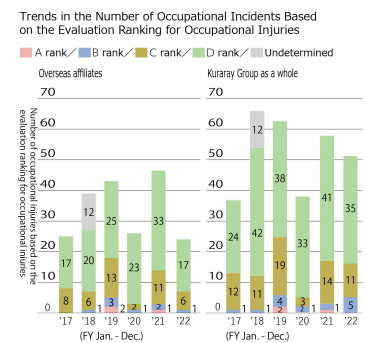
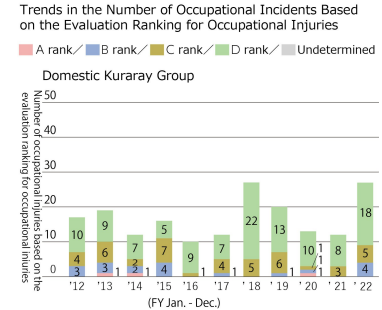
^{*1} Frequency rate of all occupational injuries: Number of all occupational injuries (lost-time and no lost-time injuries) per million working hours.

^{*2} Japan Chemical Industry Association (JCIA) Data. Source: Occupational Safety Fact-finding Survey

Guiding Principles and Action Courses for Ensuring Safety, policies and plans are thoughtfully developed and put into practice according to each plant's and division's situations and their unique ideas. Safety activities and their challenges are discussed among workers and employers at the Safety and Health Committee held by each of the domestic plants and factories every month, aiming to realize workplaces where people can safely work at ease without accidents.

Through risk assessment activities and inherent equipment safety measures, activities to reduce equipment-caused injuries have successfully decreased serious occupational injuries. However, many occupational injuries caused by individuals' unconsidered or unconscious behavior have still occurred. Therefore, education to raise the sensitivity of each employee to risks has been promoted to eliminate such occupational injuries.

In 2022, the frequency rate for all occupational injuries within the entire Group was 2.40 (2.05 in the Group in Japan and 2.98 in the Group outside Japan), which failed to meet the target (which was 2.0 or less in the entire Group) although a whole improved from the previous year. The number of occupational injuries increased in Japan more than doubled compared to the previous year after three consecutive years of decline, while the Group outside Japan made a significant improvement, reaching the best level ever. Kuraray has introduced an evaluation system to rank the seriousness of occupational injuries on a scale of one to four, from A to D. We have set a goal of zero for A and B rank serious injuries. In 2022, the total number of A and B rank injuries in the entire Group was five (four B rank cases in Japan; one B rank case in overseas). Our target was therefore not achieved. The B rank cases were injuries involving entrapment, burns to eyes from chemical vapors, and scalding from contact with hot water. These issues resulted from a lack of attention to the risks of entrapment risks or the toxic risk of chemicals and from inadequate protective measures, which we have proceeded to address. We will continue to firmly proceed toward and will strive to fulfill the objective of achieving a safe workplace where occupational injuries do not occur.



Number of Fatal Occupational Incidents

Boundary

Japan: Kuraray Co., Ltd. and subsidiaries in Japan

Overseas: Plants of overseas subsidiaries

	2016	2017	2018	2019	2020	2021	2022
Japan	0	0	0	0	0	0	0
Overseas	0	0	0	0	0	0	0

- No fatal incidents have occurred in the Kuraray Group in Japan since the one in December 2005.

- No fatal incidents have occurred overseas since fiscal 2002, the earliest year for which data is available.

Number of workers killed by occupational incidents (at subcontractors)

Boundary

Japan: Workers of subcontractors that engage in maintenance and construction works at the Company's plants, etc.

Overseas: Same as above

	2016	2017	2018	2019	2020	2021	2022
Japan	0	0	0	0	0	0	0
Overseas	0	0	0	0	0	0	0

- No fatal incidents have occurred at subcontractors in Japan since the one in March 1992.

- No fatal incidents have been reported at overseas subcontractors in the past.

Risk assessment of new business, capital investment, etc.

The Kuraray Group has in place and operates a system that carries out prior surveys and risk assessment regarding process safety and occupational safety and health of new projects and capital investments in and outside Japan through the functions of the Technical Evaluation Committee, the Technology Review Meeting and the Safety and Environment Examination to verify that safety measures and environment measures are sufficiently considered before moving to the next step. In addition, changes in raw materials, facilities, operating conditions

and the organization as well as personnel transfer in line with the organizational change (supervisors, administrators, persons in charge, etc.) are implemented after taking measures required upon assessing risks as part of the change control process. The Kuraray Group ensures safety in introducing new business and facilities by steadily implementing these initiatives.

Safety Audits for Chemical Plants outside Japan

We initiated safety audits for chemical plants outside Japan in 2019 and we have continued to grasp process safety risks and review and strengthen safety measures to strive the safety and stable operation of the Group outside Japan. In 2022, Safety audits were conducted either on-site or remotely at plants in the United States, Europe, and the newly launched plant in Asia (Thailand). In addition to following up on the status of responses to issues identified in the previous year's safety audit, we check on the progress of on-site 5S and the status of implementation of non-routine operations (hot work, startup/shutdown procedures) in order to improve the safety level at the site. In fiscal 2022, in addition to the Japan-based team that has conducted audits, we formed an in-house team of global process safety management (PSM) experts and started to audit activities. These expert team will continue to check the status of overseas chemical plants and will give us a better grasp of the process safety management level of each production site and enable us to take appropriate countermeasures.

Kuraray's Proprietary Evaluation Method for Process Accidents

Up to now, the Kuraray Group set targets for process accidents by evaluating safety performance based on the number of accidents, regardless of their severity. However, this method was insufficient for setting the appropriate targets according to risk. Accordingly, we tried to classify process accidents according to their size and include them in the evaluation rank. However, most of the process accidents that occurred within the Kuraray Group were classified as the lowest rank according to the generally used classification method (the CCPS method, etc.), which did not meet our objectives. In 2020, therefore, we developed a proprietary evaluation method. This evaluation method classifies the scale of an accident by the type of accident (fire, explosion, leakage, etc.), and determines rank by taking into account the presence or absence of human damage and factors that led to the occurrence of the accident, etc.. The method also enables further sorting and classification of accidents with the lowest rank in the CCPS classification. In this way, we aim to eliminate major accidents that fall into the A, B, or C rank as "accidents that should never occur." For minor accidents classified as D1 or D2 rank (slight leakage of hazardous materials, a small fire that is extinguished immediately, etc.), we set targets for each type of "accident that requires a reduction in the frequency of occurrence of risk," and use these targets to carry out appropriate safety risk reduction activities in accordance with risk. From fiscal 2021, we have set annual targets for security and disaster prevention based on this evaluation method and are implementing measures accordingly.

Evaluation and Classification of Occupational Injuries

Generally, categories based on the severity of actual injuries, including fatal injuries, lost time injuries and non-lost time injuries, are used as an indicator for occupational injuries. In particular, the frequency rate of lost time injuries is often used to assess the level of or establish a target for organizational safety.

However, actual safety levels may deviate from the results of this assessment method for the following reasons:

- (1) The severity of injuries is unpredictable in many cases.
- (2) The occurrence factors of an injuries are not taken into consideration.
- (3) (When it is applied to global management) criteria of determining the degree of injuries depends on the country.

In 2012, we therefore have established a proprietary evaluation and classification of occupational injuries by subtracting unpredictable factors and adding an assessment of occurrence factors. This quantifies not the actual severity of injuries but the potential severity of injuries that could have been caused by occupational injuries. Moreover, faults that caused such injuries are divided into human, equipment and managerial, rated numerically, and added to the potential severity of injury to determine the ranking from A, B, C to D.

As a result, the number of severe occupational injuries ranked A and B serves as an indicator for evaluating the level of organizational safety.

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