Responsible Chemicals Management

We fully leverage our long-standing expertise in chemicals management and our global network to reduce risks to human health and the environment throughout the product lifecycle and ensure public safety.

Risks

- Procurement of chemical raw materials strained due to resource depletion and rising prices
- Tightening of chemicals management regulations driving up compliance costs
- Consumer and employee health issues, diminished public trust in companies causing environmental impacts and lawsuits from local communities and NGOs due to improper chemical use and management practices

Opportunities

- Mutual understanding and peace of mind on chemicals management from consumers and customers feel safe and become supportive through dialogue on chemicals management, in turn leading to enhanced corporate value and business growth
- Use of innovative chemicals to differentiate products and secure advantages for further business growth
- Optimized chemical assessment and management practices to maintain stable business operations and ensure the safety of raw materials and products

Strategy, Metrics, targets and results, Initiatives

Strategy		Metrics	Targets	2024 results	Initiatives
Development	(1) Minimize environmental impact throughout the product lifecycle	CO_2 emission reduction rate for the entire lifecycle (1)	-22% 2030	-18%	Develop products and processes with reduced environmental impact (1)
		Active information provision to reduce the environmental impact of products and technologies (1)	At least one award each year	Once	
Evaluation and management	(3) Optimize risk assessment methods for efficient chemicals management	Evaluated Kao priority assessment substances (3)	21 substances 2030	10 substances	Kao's proprietary alternative safety testing method becomes an international standard (3)
		Number of risk evaluation categories using animal-free testing methods (3)	1 category each year	1 category	
	(6) Foster community safety and peace of mind by having zero chemical accidents	Percentage of areas where the impacts on health, environment and safety from chemicals are managed responsibly and sustainably while considering their stages from raw material procurement to disposal (6)	100% each year	96%	Communication with local residents (6)
		Continue building a comprehensive management system for environmental and safety information related to chemicals (6)	–	System development in progress	
Communication	(2) Promote the disclosure of chemical information and communication with stakeholders	Percentage of chemical products and raw materials with disclosed information on benefits and safety to ensure safe usage our consumers and customers (2)	100% 2030	48%	Communication with the next generation through university lectures (2)
		Formulated policies for using ingredients of particular interest to society and regulatory concerns, and created a plan for reducing the use of such ingredients, by applying the information in the Comprehensive Management System for Chemical Substances (2)	30 ingredients 2030	23 ingredients	
		Number of chemical-related engagements with stakeholders (2) (6)	–	9 times	Providing information on chemicals in products (4)
		Number of student communication and class packages using consumer-centered approaches (2)	–	2 times	GHS-compliant SDS and product labeling (4)
External collaboration	(4) Strengthen collaboration with the value chain for effective chemicals management	Number of updates to information on chemicals contained in products provided to customers (4)	–	2 times	Information provision and sharing via a private network (4)
		Number of public consultation responded to about regulatory tightening and GFC*1 implementation (5)	–	4 times	
	(5) Work closely with government and industry in developing chemicals management policies	Continued chemical-related risk communication with government agencies (5)	–	Ongoing JCIA RC Award received	Collaboration with industry organizations (4) (5)
		Number of chemical-related information exchanges with government agencies (5)	–	5 times	Collaboration with administrative bodies (5)

Financial impact

- Growth of business by differentiating chemical products (those using sustainable chemicals, etc.), enhancing competitiveness and earning consumer trust through dialogue
- Reduced compliance-related costs
- Reduced costs spent on reputational risk countermeasures by building trust with stakeholders
- Earning investor trust to encourage investment and drive business growth

Environmental and social impact

- Contributed to management efficiency across the world by optimizing (and standardizing) risk management methods for chemicals
- Ensured the human health of local communities and consumers and the sound environment
- Improvement of stakeholders' chemical literacy
- Prevented health issues among employees and fostered a secure workplace environment
- Contributed to stable value chain operation and business continuity
- Contributed to a sustainable society by helping to optimize national policies

* The numbers at the end of the metrics, targets, and initiatives indicate the strategy identifiers.
*1 GFC: Global Framework on Chemicals. An international framework for chemicals management throughout their lifecycle.

Strategy

To reduce risks and create opportunities for responsible chemicals management, we are implementing strategies that are unique to Kao, effective, and contribute to business growth and solving social issues.

Social issues

For Kao to remain a sustainable and competitive entity, it is essential to have an accurate understanding of social issues. An understanding of social issues will not only mitigate business risks for Kao but will also be an important starting point for identifying new business opportunities that will drive growth. Based on this, Kao recognizes the following social issues related to this theme.

- Improper use of chemicals as a contributing factor to the “planetary triple crisis” (climate change, pollution, biodiversity loss) identified by the United Nations
- The duality of chemicals: convenience and health and environmental risks resulting from improper management
- Growing demand for transparent information disclosure due to increased consumer awareness of product and raw material safety.
- Inappropriate use of chemicals that pose health risks to consumers and employees

Risks and opportunities

In a business environment that includes the social issues described above, Kao faces various risks while also identifying new business opportunities. Identifying risks and opportunities is an important process in formulating corporate strategies and measures. The main risks and opportunities identified by Kao in this theme are as follows.

Risks

- Procurement of chemical raw materials strained due to resource depletion and rising prices
- Tightening of chemicals management regulations driving up compliance costs
- Consumer and employee health issues, diminished public trust in companies causing environmental impacts and lawsuits from local communities and NGOs due to improper chemical use and management practices

Opportunities

- Mutual understanding and peace of mind on chemicals management from consumers and customers feel safe and become supportive through dialogue on chemicals management, in turn leading to enhanced corporate value and business growth
- Use of innovative chemicals to differentiate products and secure advantages for further business growth
- Optimized chemical assessment and management practices to maintain stable business operations and ensure the safety of raw materials and products

Strategy

To address the identified risks and opportunities, Kao has developed the following strategies. To achieve the ultimate goal of becoming an essential company in a sustainable world, as outlined in the basic policy of our Mid-term Plan K27, we will continue to enhance our chemicals management practices by fully leveraging our long-standing chemicals management expertise and global network. Furthermore, we are dedicated not only to ensuring labor safety and preventing pollution from our business activities, but also to broadly contributing to chemicals management in society through B2B operations, while driving business growth and expansion.

(1) Minimizing the environmental impact throughout the product lifecycle

We develop sustainable products and processes to minimize the environmental impact associated with chemicals throughout the product lifecycle, spanning from raw material procurement to development, manufacturing, transportation, sales, use, disposal and recycling.

Related initiative: P267 Develop products and processes with reduced environmental impact

(2) Promoting the disclosure of chemical information and communication with stakeholders

By disclosing clear information on the safety and benefit of chemicals and maintaining transparent communication to enhance stakeholders’ comprehension, we enhance public trust and promote the appropriate use of chemicals.

Related initiatives: P265 Communication with the next-generation through university courses, P266 Providing information on chemicals in products, P265 Communication with local residents, P266 GHS-compliant SDS and product labeling, P266 Information provision and sharing via a private network

(3) Optimizing risk assessment methods and streamlining management for chemicals

By assessing and managing risks precisely and efficiently based on the characteristics of chemicals, we develop risk assessment methods suited to social conditions, refine existing methods and further enhance product safety.

Related initiatives: P265 Kao's proprietary alternative safety testing method adopted as an international standard, P267 Collaboration with administrative bodies

(4) Strengthening collaboration with the value chain for effective chemicals management

We make sure to reduce risks across the value chain through close communication and collaboration with customers and to achieve stable business growth.

Related initiatives: P266 Disclosure of chemicals contained in products, P266 GHS-compliant SDS and product labeling, P266 Delivery and exchange of information through dedicated networks, P267 Collaboration with industry organizations

(5) Working closely with government and industry in developing and improving chemicals management policies

We contribute to optimal chemicals management policies by strengthening partnerships with government and industry stakeholders through communication, while promoting regulatory optimization and supporting the GFC_implementation.

Related initiatives: P267 Collaboration with administrative bodies, P267 Collaboration with industry organizations

(6) Foster community safety and a sense of trust by having zero chemical accidents

We ensure appropriate management practices according to the properties and workflows to prevent accidents at production sites, collaborate with local communities and promote comprehensive safety measures.

Related initiative: P265 Communication with local residents

Impact generated by implementing the strategies

We believe that the aforementioned strategies will have the following financial, environmental and social impacts.

Financial impact

- Business growth by differentiating chemical products (those using sustainable chemicals, etc.), enhancing competitiveness and earning consumer trust through dialogue
- Reduced compliance-related costs
- Reduced costs spent on reputation risk countermeasures by building trust with stakeholders
- Gained investor trust to encourage investment and drive business growth

Environmental and social impact

- Contributed to management efficiency across the world by optimizing (and standardizing) risk management methods for chemicals
- Ensured the human health of local communities and consumers and the sound environment
- Improvement of stakeholders' chemical literacy
- Prevented health issues among employees and fostered a secure workplace environment
- Contributed to stable value chain operation and business continuity
- Contributed to a sustainable world by helping to optimize national policies

Strategic resilience

Kao demonstrates high resilience through two different scenario analyses related to chemicals management. In a scenario assuming ever-tightening global chemical regulations and deteriorating environment, we will ensure the responsiveness by developing environmentally friendly products and processes, securing raw materials and eliminating accidents. Meanwhile, in a scenario where chemical regulations develop differently by country and region, and stakeholders grow more conscious, we will strategically address the developments by appropriately assessing risks, tracking regulatory trends, improving transparency and strengthening relationships. These approaches enable sustainable growth and business continuity under any circumstances.

Scenario analysis trial in chemicals management

In the fields of climate change and biodiversity, scenario analyses based on the TCFD*1 and TNFD*2 frameworks are being conducted. By applying these precedents to conduct our own scenario analysis regarding chemicals management, we examined how much impact the related risks and opportunities would have on Kao under the assumed scenarios, and particularly what strategies would be effective to build resilience against risks.

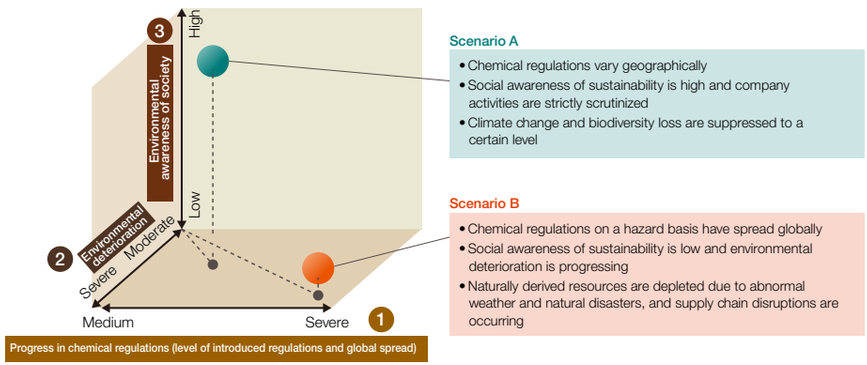
In the field of chemicals management, although a framework has not yet been established, we have attempted to create and analyze scenarios by referring to the SSP scenario,*3 in addition to the TCFD and TNFD frameworks.

The factors influencing risks are broad and involve uncertainty. Materializing risks may vary significantly, depending on potential factors such as environmental, regulatory and social external trends. For this reason, we decided to select multiple factors in external environments that are likely to be important from a medium-term perspective—instead of narrowing down to one factor or scenario—draw up multiple scenarios based on the difference in the change in those factors, and examine the scenarios.

As important factors for creating scenarios, we identified the progress of chemical regulations (the level of introduced regulations and global spread), the degree of deterioration of the global environment and the level of increase in society's environmental awareness. In a three-dimensional space based on these three factors, we created scenarios for two points at opposite poles, naming them Scenario A and Scenario B, respectively (Figure: Scenario elements and assumed scenarios). We believe that by creating opposite scenarios and assessing impacts of their respective risks, we can derive strategies that will work no matter how the external environment changes in the future, contributing to Kao's resilience.

*1 TCFD: Task Force on Climate-related Financial Disclosures
*2 TNFD: Task Force on Nature-related Financial Disclosures
*3 SSP: Shared Socioeconomic Pathways. A scenario to assess the effect of climate change, which has been developed in collaboration with the National Institute for Environmental Studies, Pacific Northwest National Laboratory, Plan Bureau voor de Leefomgeving, International Institute for Applied Systems Analysis, and Potsdam Institute for Climate Impact Research

Elements of the scenarios and assumed scenarios Progress



Scenario A
- Chemical regulations vary geographically
- Social awareness of sustainability is high and company activities are strictly scrutinized
- Climate change and biodiversity loss are suppressed to a certain level

Scenario B
- Chemical regulations on a hazard basis have spread globally
- Social awareness of sustainability is low and environmental deterioration is progressing
- Naturally derived resources are depleted due to abnormal weather and natural disasters, and supply chain disruptions are occurring

In each scenario, we estimated the degree of risk impact for Kao. We then examined which strategies would be effective if those risks were to actually occur in each scenario. The results are shown in the table below.

Scenario analysis (Estimation of the risk probability and effective strategies in each scenario)

	Item	Item Risks for Kao	Regulations differing globally / Enhanced social awareness	Severe regulations / Environmental deterioration
			Influence in each scenario	
			Scenario A	Scenario B
Environmental changes	Climate change (increased natural disasters due to temperature rises, increase in energy costs, etc.) and biodiversity loss	Suspension of plant operation	M	VH
		Division of the supply chain	M	VH
		Rising raw materials prices	H	VH
		Lack/unavailability of naturally derived resources	M	H
Policies, laws and regulations	Introduction of environmental taxes such as a carbon tax	Increase in the price of petrochemical raw materials	M	VH
	Development of a recycling system/ requirement and obligation for environment monitoring	Burden of expenses for system architecture, monitoring, etc.	M	H
	Strengthening hazard-based chemical regulations	Increase in the number of chemicals that can no longer be used Lost business opportunities due to product performance degradation or discontinuation	H	VH
	Inconsistency among global regulations	Response to regulations that differ among EU countries, other developed countries, and developing countries	VH	L
Markets	Increasing environmental awareness/ethical preferences of consumers	Loss of brand value and decline in the share	VH	L
	Growing demands from external ratings firms and investors	Loss of corporate value due to lack of information disclosure	VH	M
	Growing demand from distributors	Decline in sales due to reduced transaction volume	VH	M
Reputation	Reputation of specific chemicals / Reputation of companies as greenwashing companies	Loss of opportunities to sell products	H	M
		Decrease in brand value/corporate value	VH	M
		Litigation risks	H	H

(VH: Very heavy, H: Heavy, M: Medium, L: Light)

Effective strategies in each scenario

Scenario A	Scenario B
Appropriate risk assessments, keeping up with trends of chemical regulations, and strategic use of chemicals	Develop products and processes with reduced environmental impact
Earn trust from society through effective communication	Realize stable operations and zero chemical accident

In Scenario A, where global variation in chemicals management regulation and strong sustainability awareness among stakeholders results in closer scrutiny of corporate activities, it is essential to use chemicals strategically based on the risk assessment results and regulatory trends. Furthermore, we would need to enhance our transparency and communication to gain trust from stakeholders.

Additionally, in Scenario B, where global regulatory tightening and insufficient public awareness result in further environmental deterioration, we believe it is crucial to develop environmentally friendly products and processes, ensure stable operations and procurement of raw materials, and eliminate accidents caused by chemicals.

Based on the strategies derived from these scenario analyses, we have decided to approach the following three existing activities more actively and strategically.

1. Develop products and processes with reduced environmental impact
- Minimize the environmental impact throughout the entire product lifecycle

2. Use management systems* to optimize risk assessment methods, assess risks and strengthen risk management
- Optimize risk assessment methods for efficient chemicals management
- Foster community safety and peace of mind by having zero chemical accidents

3. Disclose information on benefits, safety and initiatives, and maintain communication
- Make information on the benefits and safety of chemicals available in an accessible and easy-to-understand way
- Effectively communicate with all people around the world to earn trust

By adopting an approach that considers a wide range of factors to examine the scenarios, we were able to derive strategies based on a multifaceted anticipation of various future possibilities. This has initiated resilient approaches to address a wide range of risks in Kao's chemicals management.

* Chemical information, safety information, legal information, volume and application information, etc.

Metrics and targets

To improve the effectiveness of our strategies, we have established performance metrics related to risks and opportunities, and we regularly monitor progress. We have set targets for the metrics related to particularly important risks and opportunities, and we are steadily promoting initiatives by utilizing the PDCA cycle to track progress toward achieving these targets.

Targets and progress

Strategy	Metrics	Results					Mid- to long-term targets	
		2020	2021	2022	2023	2024	Target value	Year
(2)	Percentage of chemical products and raw materials with disclosed information on benefits and safety to ensure safe usage for our customers	–	14% (10%)*	29% (25%)*	38% (30%)*	48% (40%)*	100%	2030
(6)	Percentage of areas where the impacts on health, environment and safety from chemicals are managed responsibly and sustainably while considering their stages from raw material procurement to disposal	–	96%	98%	93%	96%	100%	Yearly

* The figures in parentheses represent the annual progress targets.

Metrics and results

Strategy	Metrics	Results		
		2022	2023	2024
(2)	Number of chemical-related engagements with stakeholders	4 times	5 times	9 times
(2)	Number of student communication and class packages using consumer-centered approaches	2 times	2 times	2 times
(4)	Number of updates to information on chemicals contained in products provided to customers	0 times	2 times	2 times
(5)	Continued chemical-related risk communication with government agencies	8 times	8 times	4 times
(5)	Number of chemical-related information exchanges with government agencies	4 times	6 times	5 times
(5)	Number of public consultation sessions attended to learn about regulatory tightening and GFC implementation	4 times	2 times	4 times
(6)	Continue building a central management system for environmental and safety information related to chemicals	System development in progress	System development in progress	System development in progress

* Our initiatives emphasize social impact rather than being measured by frequency.

We have successfully implemented the plan for 2024. In particular, the new framework implemented following the failure to achieve the international 2020 target for chemicals management and regulatory reforms based on the EU Chamical Strategy for Sustainability (CSS) are expected to have global impacts. Therefore, to optimize the framework and new regulations, we engaged in domestic and international communication and educational activities with industry associations and government bodies, participated in public consultations and maintained communication with domestic civic organizations—all to minimize business impacts on Kao and maximize business growth opportunities.

We will contribute to the development of a sustainable world by comprehensively working on problem-solving through the fusion of individual activities and collaboration with society.

Governance

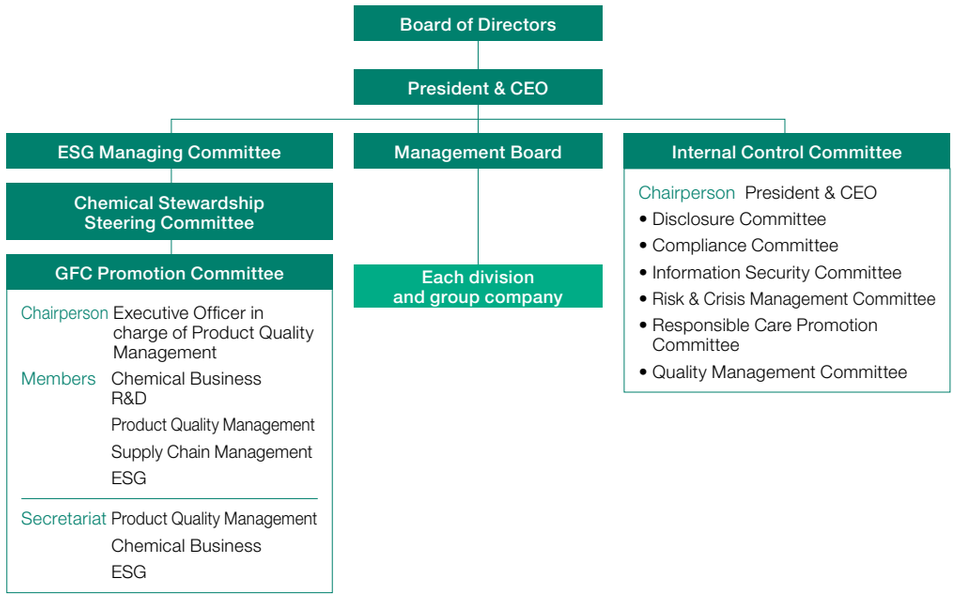
Product Quality Management serves as the primary department responsible for chemicals management, with support from the Chemical Stewardship Steering Committee chaired by the Senior Executive Officer of Product Quality Management. Under this committee, the entire company works together to enhance our chemicals management practices through the GFC Promotion Committee.

The GFC Promotion Committee meets four times a year to discuss policies and measures for chemicals management throughout the product lifecycle. The meeting is chaired by the Senior Executive Officer overseeing Product Quality Management and systematically promotes inter-divisional efforts. Furthermore, through the GFC External Experts Council, which includes knowledgeable external members, we integrate third-party perspectives and receive advice on chemicals management and specific initiatives.

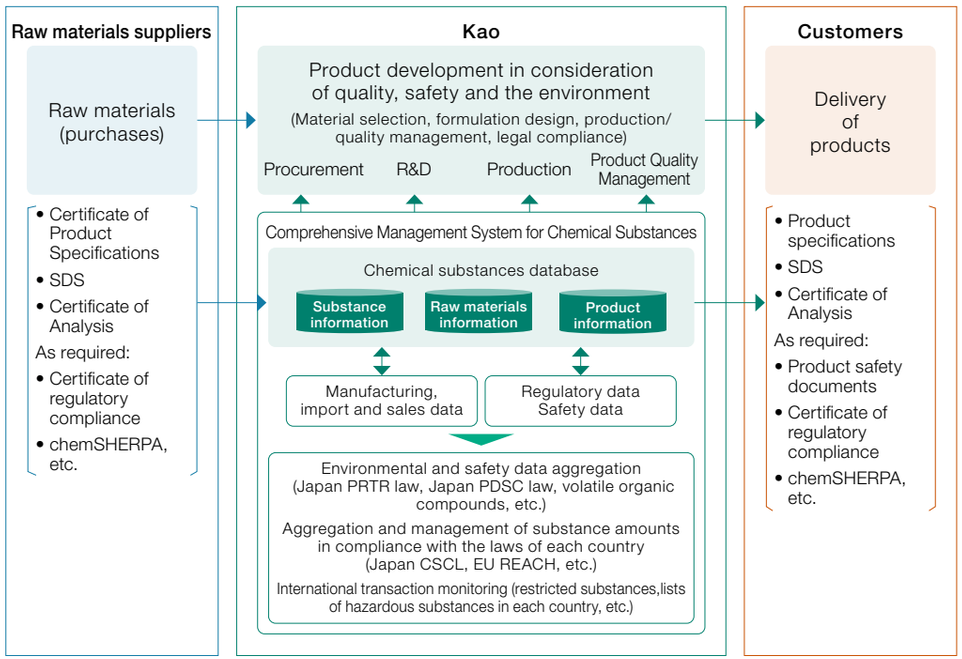
In addition to strengthening the chemicals management framework, Kao has developed and is operating the Kao Comprehensive Management System for Chemical Substances as a support tool. In this system, we have created a database of information on raw materials and chemicals contained in products to manage safety and legal information. This system ensures traceability. For example, once a problem with a raw material arises, this system enables us to quickly identify the impact on our business and to establish appropriate actions. We will continue improving the system and enhancing its functions to keep up with global trends in laws and regulations related to chemical substances and changes in the business environment.

P34 Our ESG Vision and Strategy > Governance

Framework for promoting responsible chemicals management activities



Comprehensive Management System for Chemical Substances



Risk and opportunity management

Policies

Kao has established the following operational and decision-making guidelines to implement responsible chemicals management. For details, please see the website.

Responsible Chemicals Management Promotion Policy

Management process

To address risks and opportunities that arise as we endeavor to manage chemicals in a responsible manner, we practice the following management procedure based on the PDCA (Plan, Do, Check and Act) cycle to ensure steady improvement.

P (Planning)

In December, the GFC Promotion Committee discusses the next fiscal year's activity plans for the five teams, which are subsequently approved by the chair.

D (Implementation)

Please refer to our initiatives (P263-267).

C (Evaluation of results)

The GFC Promotion Committee checks the progress (four times a year) and the GFC External Experts Council provides third-party viewpoints to properly track and assess the progress (twice a year).*1 The progress is reported at least once a year to the ESG Managing Committee, Management Committee or Executive Committee.

*1 The evaluation criteria consist of the committee OKR, the five teams' OKRs and published KPIs. The progress is reported to the committee chair.

A (Corrective action)

Annual activities are reported to the GFC Promotion Committee, where any necessary corrections and modifications are applied (December).*2

*2 Approved by the committee chair.

Initiatives

Kao is engaged in a variety of initiatives to manage chemicals in a responsible manner. These initiatives are based on the aforementioned strategies and are being promoted in coordination to achieve our goals. Here, we would like to introduce some of the important initiatives from among the many we are undertaking.

	Strategy	Initiatives		
Development	(1) Minimizing the environmental impact throughout the product lifecycle	Develop products and processes with reduced environmental impact (More actively utilize sustainable raw materials, reduce LC-CO_2, save water, reduce waste) Kao's Activities in Promoting the GFC: Developing Bio IOS, a Surfactant That Effectively Utilizes Oil and Fat Resources		Continuously develop and demonstrate environmentally friendly products and processes, and receive awards for such achievements • Kao's Activities in Promoting the GFC: Developing Bio IOS, a Surfactant That Effectively Utilizes Oil and Fat Resources • JCIA LRI Annual Workshop 2024
Evaluation and management	(3) Optimize risk assessment methods for efficient chemicals management	Kao's proprietary alternative safety testing method becomes an international standard EpiSensA Alternative Method for Skin Sensitization Testing Developed by Kao Added to the OECD Test Guidelines	Evaluated Kao priority assessment substances Kao's Safety Summary of chemicals for priority risk assessment	Build technologies for next-generation environmental evaluation that understands ecosystems Environmental RNA-based Ecological Impact Assessment
	(6) Foster community safety and peace of mind by having zero chemical accidents	Examine the entire process, from raw material procurement to disposal, to assess health, environmental and safety risks at operational sites Kao Receives from JCIA Both First Prize in Safety Award and RC Jury's Special Award for Its Chemicals Management Initiatives	Engage in dialogue with municipalities to communicate with local residents • Kao Receives from JCIA Both First Prize in Safety Award and RC Jury's Special Award for Its Chemicals Management Initiatives • Held Hazardous Material Fire Response Training with the Kao Corporation Wakayama Plant (Naka Fire Station)	
Communication	(2) Promote the disclosure of chemical information and communication with stakeholders	Communication with the next generation through university lectures	Disclose benefits and safety information on products and raw materials that can be safely used over the long term • Kao's Safety Summary of chemicals for priority risk assessment • GPS safety summary of Kao Chemical products	Policies relating to the use of ingredients of high social concern About Ingredients Contained in Kao's Products
External collaboration	(4) Strengthen collaboration with the value chain for effective chemicals management	Provide information on chemicals in products Chemicals management activities	GHS-compliant SDS and product labeling Chemicals management activities	Information provision and sharing via a private network Chemicals management activities
	(5) Work closely with government and industry in developing chemicals management policies	Engage in dialogue with government bodies and public education regarding international frameworks (Posts) • Social Changes and International Activity Related to Chemicals Management in Recent Years • 21st Policy Dialogue on Chemical Substances and the Environment • Workstreams of the open-ended ad hoc group on measurability and indicators	Participate in public consultation sessions on regulatory reforms and engage in continuous dialogue with industries • Initiatives in Resources, the Environment and Safety for Making the Planet Better • Workstreams of the open-ended ad hoc group on measurability and indicators	

Kao's proprietary alternative safety testing method becomes an international standard

Region: Global
Corresponding strategy: (3)

Skin sensitization tests play an important role in chemical safety assessment. However, with conventional testing methods, accurately assessing the skin sensitization potency of oleo chemical raw materials and other poorly water-soluble substances has been challenging. Therefore, there has been an unmet demand for assessment methods that are not affected by the solubility of target substances.

To address this challenge, Kao developed "EpiSensA," a proprietary alternative skin sensitization testing method. In 2024, this method was the first of its kind and was featured in the testing guidelines for the Organisation for Economic Co-operation and Development (OECD), a widely recognized international standard.

EpiSensA has made it possible to assess the skin sensitization potency of poorly water-soluble substances, including oleo chemical raw materials, without experimenting on animals. This achievement has contributed to a more ethical and efficient approach to product safety in a wide range of fields, including oleo chemicals and cosmetics industries. Kao's initiative was highly commended, and in FY2024, it received the "Society Award" from the Japanese Society for Alternatives to Animal Experiments.

Communication with the next generation through university lectures

Region: Global
Corresponding strategy: (2)

Kao emphasizes developing and communicating with next-generation talent and is actively collaborating with universities. For example, we are working with the environmental health team at Teikyo University's School of Medicine in the Hygiene and Public Health Practice Course, providing students with expertise on the appropriate use and management of chemicals. In addition, in the Textiles Advisor Practice Course at Kyoritsu Women's University, we provide learning opportunities at Genba to practice responsible chemicals management and consumer communication.

Kao aims to develop human resources capable of educating others on the appropriate use of chemicals. In particular, we help train talent who can pass on accurate knowledge about chemicals and appropriately communicate with consumers. We are exploring effective communication approaches to sincerely address students' questions and concerns about chemicals while promoting awareness and behavioral changes regarding chemicals and corporate activities.

We will continue to enhance our external collaborative relationships and address social issues by developing next-generation leaders.

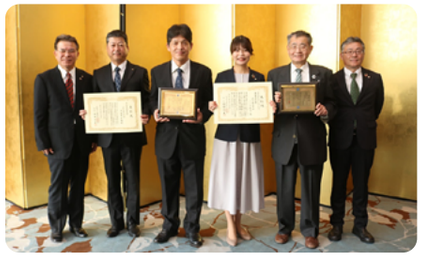
Communication with local residents

Region: Global
Corresponding strategies: (6)

To provide a safe living environment for residents living near our plants, Kao emphasizes communication with local communities and aims to establish a framework for close collaboration with government agencies and these communities.

As part of these initiatives, we regularly engage in dialogue with the Wakayama City Fire Department to verify emergency response measures for potential chemical leaks or explosions at our plant and work with the department to minimize their potential impacts. This initiative was highly applauded, and in May 2024, we received the RC Special Judges' Award for the second consecutive year at the 18th Responsible Care Awards presented by the Japan Chemical Industry Association (JCIA).

Going forward, we aim to expand opportunities for direct dialogue with individual local residents, in addition to initiatives targeting neighborhood associations. We will continue to develop and implement strategies incorporating insights from overseas case studies and expert advice, fostering safe and secure communities while building harmonious relationships with them.



Providing information on chemicals in products

Region: Global
Corresponding strategies: (4)

Kao uses chemSHERPA-CI, an industry-standard communication format, to appropriately deliver regulatory information on chemicals contained in our industrial products and enhance chemicals management practices throughout the supply chain. ChemSHERPA-CI is a communication tool designed to accurately and efficiently share information necessary for chemicals management. By using this tool, companies can standardize their B2B communication format.

Kao uses chemSHERPA-CI to efficiently deliver information across the supply chain, as well as obtain and share the latest regulatory information through bi-annual updates. This helps us optimize chemicals management practices throughout the supply chain and promptly adapt to regulatory requirements.

We will continue to stay on top of the latest global regulations and other trends related to chemicals management by quickly obtaining up-to-date information from chemSHERPA-CI, thereby enhancing our risk control capabilities for chemical substances.

GHS-compliant SDS and product labeling

Region: Global
Corresponding strategies: (4)

To ensure that our industrial products are properly used in accordance with the laws and regulations of the respective countries and regions, we are creating and revising SDS*2 and product labels in compliance with the local GHS rules*1.

In Japan, we successively revised the SDS in accordance with the amendments to the Industrial Safety and Health Act and promptly provided the updated SDS to our customers before the enforcement date.

Since regulations vary by country and region, it is crucial to gather the latest regulatory information and make prompt and accurate revisions accordingly. Kao collects the latest regulatory information from both domestic and international sources while appropriately creating and revising the SDS and product labels in accordance with laws and regulations. This way, we strive to enhance chemicals management practices throughout the supply chain.

*1 GHS: A globally harmonized system for chemical classification and labeling. It recommends classifying chemicals by their hazard types and displaying labels or providing Safety Data Sheets that clearly indicate those hazards, following globally unified rules.
*2 SDS: Safety Data Sheet. A document that provides information on the hazards and precautions for chemicals contained in the product.

Information provision and sharing via a private network

Region: Global
Corresponding strategies: (4)

We work closely with distributors of our industrial products and leverage a dedicated network to promote appropriate chemicals management practices in the supply chain. This dedicated network provides online access to information from SDS, chemSHERPA-CI and other related sources, enabling distributors to properly manage chemicals and ensure compliance with relevant regulations.

In addition to providing information, we conduct trainings and briefings for distributors to help them better understand the importance of chemicals management. In particular, we hold an annual face-to-face briefing session to exchange views with major distributors, sharing challenges faced at Genba and insights to help inform solutions.

Develop products and processes with reduced environmental impact

Region: Japan
Corresponding strategy: (1)

Kao delivered a lecture and participated in a panel discussion on GFC and the circular economy at the JCIA LRI Research Report Meeting in 2024. We presented our achievements in developing environmentally friendly products and processes to domestic and international attendees from industry, government and academia who are interested in chemicals management and the circular economy.

This presentation helped raise awareness among the audience regarding Kao's environmental sustainability efforts, inspiring greater support of them and encouraging positive changes in attitudes and behaviors toward building a more sustainable society. Engaging in active discussions and strengthening partnerships with attendees has opened new doors for industry-wide collaboration in tackling shared challenges.

Going forward, we will further promote adoption of the GFC to accelerate sustainability and business activities.

P104 Responsibly Sourced Raw Materials, P115 Decarbonization, P140 Water Conservation

Collaboration with administrative bodies

Region: Global
Corresponding strategy: (5)

Kao is intensifying our efforts to collaborate with regulatory and government agencies, aiming to build stronger trust and improve our chemicals management practices as a company that handles chemical substances. In FY2024, we held five meetings with government agencies to share information and engage in dialogue on policies for chemicals and the environment. Following the adoption of the GFC, we published three posts designed to raise awareness among the Japanese public and encourage collaboration. Furthermore, to roll out the GFC across other countries, we are dedicated to improving chemicals management practices within and outside Japan by helping UN working groups and participating in surveys.

To propose policies that encourage changes in stakeholder awareness and behavior regarding chemical substances, and to develop and carry out the plan to implement the GFC in Japan, ongoing dialogue remains essential. Kao will continue to maintain cooperative relationships with government agencies and other stakeholders while advancing toward proper chemical management practices. Through these efforts, we will realize our vision while simultaneously enhancing corporate value and addressing social issues.

Collaboration with industry organizations

Region: Japan
Corresponding strategies: (4) (5)

Kao is actively collaborating with domestic and international industries for various ongoing initiatives to fulfill our responsibilities in chemicals management. As part of these efforts, we have attended public consultation sessions on laws and regulations that are enforced according to the EU CSS. In addition, we are actively involved in research and response regarding plastic additives as part of the efforts to formulate the UN Plastics Treaty. We are also working to enhance chemicals management practices throughout the industry through ongoing collaboration with key trade organizations, including the Japan Chemical Industry Association, Japan Soap and Detergent Association, Japan Cosmetic Industry Association, Titanium Dioxide Industry Association and Conference of Fluoro-Chemical Product Japan.

Furthermore, we are leading discussions within various industry groups to educate the Japanese public on the GFC. We also focus on promoting the proper use of chemical products by consumers and provide educational information through the Japan Soap and Detergent Association's website.

Encouraging changes in consumer awareness and behavior related to chemicals requires ongoing cross-industry initiatives and communication. Kao will continue to strengthen collaborative relationships with the broader industrial community, while playing a leading role to fulfill our corporate responsibilities in chemicals management.

Employees' opinions

A tireless journey for better chemicals management and personnel safety from potential hazards

Toshio Tahara
Technology Development
Quality Technology Group (core quality technology)
Senior engineer (chemicals management)

I became involved in chemicals management following the amendment to the Industrial Safety and Health Act in 2016. While adopting a chemical risk assessment* (RA) tool for the health and safety of all employees handling chemicals at work, Kao accelerated digitalization of the Safety Data Sheet (SDS) for raw materials to enhance efficiency and developed a proprietary automated RA calculator that utilizes SDS digital data on raw materials. This initiative also served as an important technological foundation when we had to enhance our RA in accordance with the 2024 amendment to the Industrial Safety and Health Act. However, it became evident that traditional digital data did not contain sufficient information. By revising the old system and utilizing AI, we reconstructed the SDS information digital data over a short period. Furthermore, we developed a new RA tool (global version), which has been increasingly utilized at Kao since April 2024. The SDS data digitalization tool and the new RA tool have become available for external use, and we are accepting requests from external parties wishing to utilize the programs. Moving forward, we plan to expand the digitalization of SDS for chemicals handled at our domestic plants to our overseas group companies. By establishing an international central management system for SDS digital data, we aim to implement chemical RA on a global scale. We are also focusing on developing tools that assist in determining when special health check-ups are required, as part of our ongoing efforts to ensure personnel safety and health.

* Chemical risk assessment: A series of processes to identify the hazards and harmfulness of chemicals, estimate the degree of health impairment or danger to personnel, and explore measures to reduce risks.

Stakeholder engagement

Expectations for Kao's responsible chemicals management

Yoshiko Arita
SHUFUREN (Association of Consumer Organizations)
General Manager of Environment Division (Former president)

The United Nations warns of the triple planetary crisis, i.e., climate change, biodiversity loss, and pollution from chemicals and waste.

As one of their ongoing climate initiatives, Kao is striving to reduce greenhouse gas emissions, which cause global warming, with a target of reducing the total emissions across their global sites by 22% by 2030 (vs. 2017). As part of efforts to achieve the target, the company has introduced solar power equipment for internal use at two of their domestic operational sites. In addition, all purchased electricity has been replaced with renewable energy at a total of 10 operational sites, both domestic and overseas. I highly commend the plan's ambitious goals of switching to 100% renewable energy for all purchased electricity in Japan by 2025 and globally by 2030. I hope that, as mentioned in the top message, even if Kao faces changes in the uncertain social environment, it will remain the leading company that protects future lives.

The company has linked these initiatives for reducing and recovering biodiversity loss as outlined in Global Biodiversity Outlook 5 with the Kirei Lifestyle Plan (KLP). From the KLP, they have selected activities for the following themes that have strong connections to biodiversity: decarbonization, zero waste, water conservation, prevention of air and water pollution, responsible chemicals management and responsible sourcing of raw materials.

I'm truly impressed with the employees' commitment to using a minimal amount of biodiversity-conscious raw materials for a maximum impact, and how Kao incorporates biodiversity perspectives into the entire lifecycle from raw material procurement to product design, usage and disposal. Their initiative allows consumers to effortlessly lead biodiversity-oriented lifestyles simply by choosing and properly using the company's products, in turn building a better world. However, perhaps the company should be more attentive to consumer feedback rather than being confident that their product design and usage recommendations are already optimal. I would suggest disclosing the reasons for missing the target VOC emission disclosure rate, which was established in line with KLP mid-term goals.

Kao values the five basic elements of responsible care (RC) activities, which are voluntary corporate initiatives comprised of (1) environmental conservation, (2) process safety and disaster prevention, (3) occupational safety and health, (4) chemical and product safety, and (5) distribution safety, as well as the key focus area of communication with society. Promoting these RC activities helps them build strong relationships with stakeholders, enhancing both brand reputation and trust in the company.

I would like to conclude by emphasizing that my long-term participation in public communication opportunities through RC activities and GFC promotional initiatives (responsible chemicals management) has built my trust in Kao, leading me to continue using their products.

Kao's response to the views expressed last year

In 2024, Professor Kazuo Matsushita (Professor Emeritus of Kyoto University) expressed his expectations regarding several areas: (1) increasing utilization of sustainable raw materials, (2) reducing the content of substances of regulatory concern, (3) changing refrigerants used at manufacturing sites, (4) reducing CO_2 emissions through energy conservation, electrification and biomass utilization, and (5) conducting joint training with the local fire department to build trust and collaborating in a more practical manner. In response, we have been working to ensure the traceability of sustainable raw materials, steadily reducing CO_2 emissions from Scope 1 and 2. In particular, at the Wakayama Plant, we have established action protocols with the fire department to minimize potential leakage volumes and mitigate the scope of impact, for which we received the Japan Chemical Industry Association's RC Special Judges' Award. Going forward, we will continue to advance our chemicals management practices to fulfill our responsibilities as a company handling consumer and industrial chemical products.