

## Chemical Safety

Since its founding, the Kumiai Chemical Group has contributed to the realization of a sustainable society through the research and development of safe and effective agricultural chemicals and high-quality fine chemicals. We give the utmost consideration to the safety of chemicals and their impact on the environment and human health, comply with relevant domestic and international laws, regulations, and guidelines, and respond appropriately to social demands and regulatory requirements. We ensure safety throughout the entire product lifecycle and promote sustainable business activities that earn the trust of society through transparent corporate practices.

[Basic Approach]

- Compliance with Laws and Regulations and Conformity with International Standards

We comply with domestic and international laws, regulations, and safety standards, and proactively strive to achieve even higher standards.

- Thorough Safety Management Throughout the Entire Life Cycle

From research and development through sourcing, procurement, manufacturing, logistics, sales, and disposal, we identify potential risks across the entire chemical life cycle and implement appropriate measures to ensure responsible management.

- Accurate Information and Sincere Communication

We accurately convey information regarding the safety of chemical substances and products to our customers and business partners, and act in a manner that upholds their trust.

- Accurate Information Provision of Chemical Substances

To promote the voluntary management of chemical substances, we updated our SDS (Safety Data Sheet) issuance system in 2023 and established an efficient management framework. The Research & Development Division, Domestic Sales Division, Overseas Sales Division, Chemical & Specialty Products Sales Division, Production & Procurement Division, and Sustainability Promotion Department collaborate to stay abreast of the latest laws and chemical information and issue compliant SDSs. New or revised SDSs are made available to the President, executives, and all employees via our groupware. Additionally, SDSs for agricultural chemical products are published on our corporate website. This enables us to provide accurate information on chemical substances quickly and reliably to our employees,

affiliated companies, and customers, thereby promoting the safe use of chemical substances. We have created SDSs for all products and published them on our corporate website.

List of SDSs

<https://www.kumiai-chem.co.jp/products/agrochemical/sds/>

- Dissemination of Safety Information on Chemical Substances

As a full member of CropLife Japan, we conduct activities based on the “Stewardship (Product Safety Management)” code of conduct. In addition to disclosing Safety Data Sheets (SDS), we disseminate safety information through web content, integrated reports, and tours of our factories and research laboratories.

- Compliance with Laws and Regulations

For our main products, agricultural chemicals, we verify safety and environmental impact throughout the process from development to market launch in accordance with OECD test guidelines and the GLP (Good Laboratory Practice) system. Since agricultural chemicals are products related to the environment and food, we ensure safety in accordance with relevant laws and regulations, including the following (examples of competent ministries and agencies):

Industrial Safety and Health Act (Ministry of Health, Labour and Welfare)

Agricultural Chemicals Regulation Act (Ministry of Agriculture, Forestry and Fisheries)

Food Safety Basic Act (Cabinet Office) / Food Sanitation Act (Ministry of Health, Labour and Welfare, Consumer Affairs Agency)

Poisonous and Deleterious Substances Control Act (Ministry of Health, Labour and Welfare)

Water Supply Act (Ministry of the Environment) / Basic Act on the Environment / Water Pollution Prevention Act (Ministry of the Environment)

Act on Waste Management and Public Cleansing (Ministry of the Environment)

Fire Service Act (Ministry of Internal Affairs and Communications) / Laws and Regulations Concerning the Management of Chemical Substances (Ministry of Economy, Trade and Industry)

- Proper Management and Handling of Chemical Substances

In managing and handling chemical substances, we conduct risk assessments prior to work and take appropriate measures. For storage management, we utilize reagent management systems and other tools to ensure proper control of designated quantities of hazardous materials and quantities of toxic substances. In process development involving the large-scale handling of chemical substances, we have established thermal safety evaluation standards to

address physical hazards such as heat generation and decomposition, and have built a system to ensure safety during scale-up studies. Furthermore, to address chemical hazards such as runaway reactions caused by mixing, we conduct risk assessments based on specification standards, thereby promoting research and development activities with a strong focus on safety. The responsible departments monitor changes to relevant laws and regulations and respond promptly to any legal amendments.

[Results on Reduction of Concern Substances as a Risk Mitigation Measure]

- Track record in the Research and Development Division

In response to the government ordinance that banned the use of 33 ingredients for agricultural chemicals, our company modified the recipes of products containing the specified substances (e.g., borax; action taken: pesticide registration obtained on October 29, 2025).

We are replacing formulations with those that reduce risks to non-target organisms and the environment. For example, we decrease total amount of organic solvents in agricultural chemical products and develop formulations mindful of operator exposure, such as our in-house "MAMETSUBU®" formulation. As a specific example, we switched to a naphthalene-free solvent option.

- Track record of organic solvent use in factory plants

We have replaced the organic solvents used for changeover cleaning with less hazardous alternatives (switching from methanol to denatured ethanol, and from xylene to neutral detergents), and we also use protective equipment to prevent exposure. In addition, some newly introduced equipment now supports automatic cleaning, significantly reducing tasks that involve direct contact between people and solvents. We have improved our analytical methods for quality control and discontinued the use of chloroform.

- Track Record of Recipe Modification Considering User Safety and Convenience

Following the amendment to the Designation of Poisonous and Deleterious Substances Ordinance, which took effect on July 1, 2020, 2-isobutoxyethanol and formulations containing it (excluding those at 10% or less) were designated as deleterious substances. In response, we modified the recipes of the affected products to reclassify them as non-hazardous substances, making them easier for users to handle.

[Compliance with Various Regulations]

- We have established a management system based on the Industrial Safety and Health Act (ISHA) and respond promptly to legal amendments related to chemical substance

management. This includes conducting risk assessments, reviewing posted notices, selecting appropriate protective equipment, and conducting awareness campaigns for handlers.

- We do not use persistent organic pollutants (POPs) covered by the Stockholm Convention, and we have completed the disposal of products containing low-concentration PCBs and similar substances.

- Our Chemical Research Institute is certified by the Ministry of Agriculture, Forestry and Fisheries as a GLP testing facility for agricultural chemicals. We conduct tests required for pesticide registration, including tests on active ingredient composition (composition analysis of active ingredients, analytical methods for active ingredients, etc.) and physical and chemical property tests (melting point, water solubility, hydrolyzability, particle size, stability over time, etc.), in accordance with OECD test guidelines and GLP standards.

#### [Regular Training on Chemical Substance Management]

Each business site appoints a chemical substance manager and conducts training tailored to the specific needs of that site. Our in-house training system, “RC Academy,” offers educational programs on chemical substances, including training and implementation of fit testing (covering group companies as well), supervisor training, and chemical substance manager seminars.

#### [Ethical Considerations in Animal Testing]

In our internal safety assessments, we adopt non-animal testing methods to the greatest extent possible. For the safety evaluation of workers and development compounds, we are introducing and developing non-animal methods, such as mutagenicity assessments using bacteria, the utilization of in vitro models included in OECD test guidelines, and the implementation of endocrine disruption screening tests using yeast and cultured cells.

#### **【Looking Ahead】**

While compliance with chemical-related laws and regulations (zero violations) is a given, we promote the voluntary management of chemical substances in accordance with our basic policy on Responsible Care (Occupational Safety and Health Policy). In the near future, we will adapt to revisions to JIS Z 7252 (Classification of Chemicals Based on GHS) and JIS Z 7253 (Communication of Hazard and Risk Information Based on GHS), which are standards related to SDS and GHS classification.

**【OHS (Occupational Health and Safety) Targets】**

Achieve zero occupational accidents through the promotion of occupational health and safety

- Number of lost-time accidents: 0
- Number of non-lost-time accidents: 15 or fewer

Strengthening chemical substance management

- Workplaces classified as Category 3 based on workplace environment measurements: Zero

Environmental improvements aimed at creating a comfortable workplace

- Average annual paid leave utilization rate (by FY2030): 80% or higher
- Average monthly non-statutory overtime hours: Less than 10 hours
- Stress check participation rate: Maintain 90% or higher