

We offer products that are gentle on the environment and people by reducing and strictly managing environmentally-sensitive substances.

■ Concept

In order to minimize the adverse impact caused by environmentally-sensitive chemical substances contained in our products, we are committed to building a system to reduce and strictly manage such substances in all manufacturing processes including those conducted by suppliers. Because environmentally-sensitive chemical substances need to be treated individually when products containing them are disposed of, reducing the use of these substances in products will also considerably reduce the recycling cost in addition to lessening the environmental impact a product has during its lifecycle.

In addition, for more comfortable and safer use of our products by customers, we are proactively conducting activities to reduce the emissions of ozone, dust and VOCs* from the use of our products, and ensuring the safety of supplies to be used with the products through management systems built to our own criteria.

* VOCs: Volatile organic compounds

■ Targets for Fiscal 2010

- ◎ Strengthen the system for management and communication to comply with the REACH Regulation.
- ◎ Observe Ricoh standards that cover such substances as ozone, dust, and VOCs.

■ Review of Fiscal 2010

Concerning emissions of environmentally sensitive substances generated by products, Ricoh was able to quickly satisfy the Blue Angel requirements, which came into force in January 2007. All the copiers,

multifunctional copiers, and printers in the 20 series launched in fiscal 2010 meet Ricoh standards for ozone, dust, and VOCs.

■ Future Activities

We will continue our efforts to further reduce the use of environmentally sensitive substances in products.

<Global>

● Achievement of standards for environmentally-sensitive chemical substances

	RicoH standards (mg/h) ¹ (Blue Angel requirements enforced in January 2007)		Models that achieved the standards ²
	Color	Monochrome	
Ozone	3.0	1.5	20
Dust	4.0	4.0	
Styrene	1.8	1.0	
Benzene	< 0.05	< 0.05	
TVOC	18	10	

1. RicoH standards also meet the Blue Angel requirements.

2. Figures indicate the number of product series, including copiers, multifunctional copiers, and printers, launched in fiscal 2010 that achieved these standards.

Controlling the use of environmentally-sensitive substances

<RicoH Group (Global)>

Ricoh set original standards for environmentally sensitive substances that could be used in its products in 1993 as an indication of its determination to reduce these substances. Since then, the company has regularly reviewed the standards to incorporate the latest regulations and scientific knowledge into them, and has controlled chemical substances accordingly. In addition, all the divisions engaged in production (design, procurement, manufacturing) have worked together to improve the chemical substance control system. By the end of March 2006, a chemical substance management system (CMS)¹ for suppliers was created on a global basis. At the same time, the chemical substance control system within the Ricoh Group was strengthened, completing the management system for chemical substances contained in products within Japan. We completed a system for use outside Japan in July 2006.

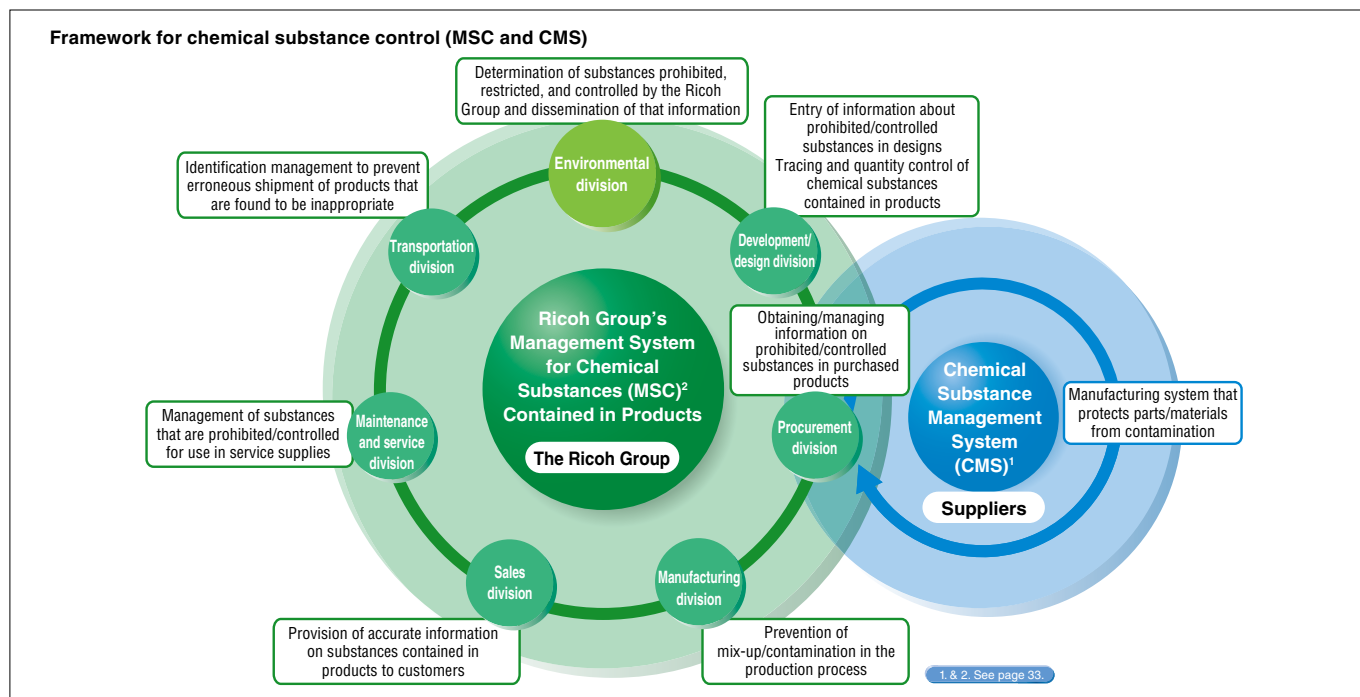
Ricoh is currently working on upgrading the management system for chemical substances (MSC)² contained in products by establishing a “first response flow” in case any harmful chemical substances should find their way into products. The MSC is designed to prevent the expansion of pollution (shipment of parts

or products) and the recurrence of such an accident. In addition, in fiscal 2007 Ricoh also began—as part of its risk management—to review the list of chemical substances controlled by the Group to tighten the restrictions on and control of the use of chemical substances that can potentially cause harm to the human body and the environment, and expanded the list in fiscal 2008. To comply with the REACH Regulation³, since fiscal 2007 we have been working on the establishment of a communication system to ensure that chemical substance information is communicated to every corner of the supply chain.

In fiscal 2009, we also started to operate a quantity control system that keeps track of which chemical substances controlled by Ricoh are contained in which part of our equipment and in what quantities. With this quantity control system in place, we are now well-positioned to take prompt action in the event of permission to use currently approved chemical substances being withdrawn due to regulatory change.

1. A manufacturing system to prevent the contamination of parts/materials by environmentally sensitive substances; the Ricoh Group supports suppliers' CMS efforts by providing relevant information and verifying their CMS.
2. A system to manage the substance groups whose use in equipment is prohibited, restricted, or controlled by the Ricoh Group, as well as to trace and control the quantities of other chemical substances contained in products.

3. See page 34.

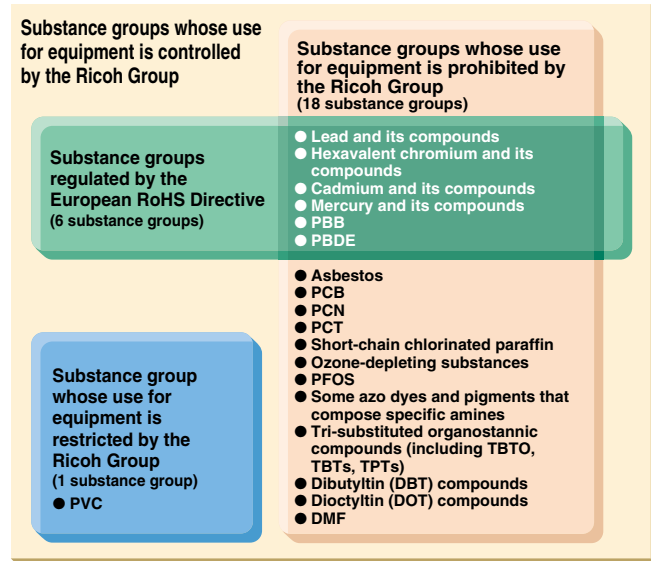


Compliance with the REACH Regulation <Ricoh Group (Global)>

Under the REACH Regulation¹, a European regulatory framework on chemical substances, producers and importers of substances, preparations and articles (i.e., products, parts, etc. that are given shape during the manufacturing processes, such as the main units of equipment, electronic parts, paper, and packaging materials) produced in, or imported into, the EU are required to register and give notice of all chemical substances included in their products whose quantity is above certain threshold levels. Producers and importers are also required to fulfill their duties to communicate information to customers and general consumers on designated substances contained in products². It is anticipated that the number of chemical substances subject to this regulation will eventually exceed 1,500. The Ricoh Group established the REACH Compliance Working Group with 180 attendees from the production division (including the general sales division) in February 2008 to solidify Ricoh's REACH compliance system. The core mission of the working group is to develop a system that will allow us to collect and manage chemical substance information accurately and efficiently from partners both upstream and downstream in the supply chain, including manufacturers of materials, chemicals, and parts, as well as Ricoh Group production facilities, and to provide the information to customers upon their request.

As one of the founders of the Joint Article Management Promotion-consortium (JAMP)³, Ricoh worked to develop an information communication system on chemical substances for the consortium's use. Based on the JAMP system, the Ricoh Group developed a database and formulated common rules regarding for the communication of chemical substance information in fiscal 2008. We then held explanation meetings for some 1,200 Japanese, Chinese, and Korean suppliers. In fiscal 2009, the system was implemented, allowing us to take stock of existing and potential issues and improve the level of our efforts in this area. To ensure the accuracy and completeness of our information collection on chemical substances, we have conducted training sessions targeting employees in procurement and quality management divisions and others, and approximately 120 employees have

The relationship among substance groups whose use for equipment is either prohibited, restricted, or controlled by the Ricoh Group and substance groups regulated by the European RoHS Directive



been certified as "leaders" of our chemical substance information management efforts. We have also developed and provided our suppliers with easy-to-understand manuals and guidance materials explaining how to access the information on chemicals contained in Ricoh products using JAMP tools. From October 2009, the information on SVHC in products for the European market has been made available on our website⁴. The Ricoh Group is fully able to comply with REACH requirements and is ready to respond promptly to future development of the regulations.

1. This is a new EU regulatory framework for the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). It requires the registration and management of all chemical substances used in businesses in accordance with their conditions of use to ensure safe assessment of chemical substances. It came into force on June 1, 2007, and the regulations have been gradually enforced since June 1, 2008.

2. Called "Substances of Very High Concern (SVHC)," these are substances on the European Chemicals Agency's candidate list for eventual inclusion in Annex XIV.

3. See page 35.

4. On the Health & Safety Information page of Ricoh Europe's website, see REACH FAQs, Q3 "SVHC – Machines" (http://www.ricoh-europe.com/environment/reference-material/health_safety_information/index.xhtml)

Enhancing collaboration with JAMP, aiming to contribute to the realization of a society in which the impact of chemical substances on the environment is minimized

<Ricoh Group (Global)>

In accordance with the REACH Regulation, effective in 2007, under which registration of applicable chemical substances started in 2008, all manufacturers exporting products to Europe now need to get ready for full compliance. Since this regulation is being applied across the entire supply chain, manufacturers of materials, chemicals, and parts in the upstream and middle-stream must provide information on chemical substances used by them to each client they deal with. To ensure this information is communicated and disclosed efficiently and smoothly, it was recognized in the industry that there was a need to develop common rules, formats, and a database that can be shared by all manufacturers.

Based on this recognition of the need to develop and disseminate a common industry-wide communication system to share information on chemical substances contained in articles¹ to enhance the competitiveness of the industry, the Joint Article Management Promotion-consortium (JAMP) was established in September 2006. Under the leadership of 17 promoter companies, including manufacturers of electrical machinery, chemicals, and precision machinery, JAMP is said to be the world's first industry-wide organization of its kind. One of the major missions of JAMP is to create the Material Safety Data Sheet plus (MSDSplus) and the Article Information Sheet (AIS)², which are basic sheets used for the communication of information on chemical substances contained in products. JAMP has developed JAMP-IT, an information network system that enables manufacturers to register their chemical substances information on the JAMP server and share it among members. Launched in June 2009, this system eliminates the need

for individual manufacturers to develop their own communication systems, and enables them to meet the requirements of the REACH Regulations efficiently. The joint consortium signed a memorandum for cooperation in the field of chemical substances management with a Korean government agency in December 2009, and Thai and Malaysian government agencies in March 2010. This move is expected to promote global use of the JAMP system and help supply chains to meet global standards appropriately.

Ricoh, agreeing with the purpose of JAMP, joined the consortium as a promoter company. Ricoh has played an important role in JAMP since its inception as a member of both the Project Planning & Implementation Committee and the Internationalization Planning & Implementation Committee, aiming to support the administrative work for the operation of the organization and to improve the international harmonization of the system. In December 2009, the Ricoh Group announced that it may use JAMP-GP as a group communication infrastructure, in combination with RaVender-Net (Networking for Venders and Ricoh), the Group's information communication network for suppliers.³ In October 2010, the Group began to disclose the MSDSplus and AIS chemicals list for its main products through JAMP-IT.⁴ We plan to add chemical information of other products to the list, thereby continuing to update the list. Through these measures and activities, Ricoh will continue working to contribute to the realization of a society in which the impact of chemical substances on the environment is minimized.

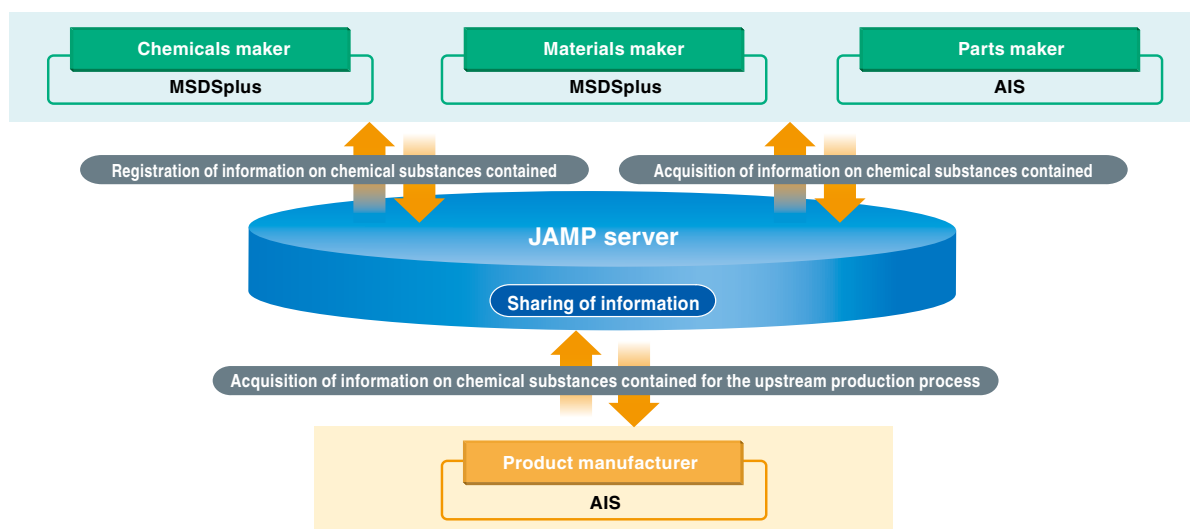
1. Defined as "objects that have a shape and whose size is measurable," including manufactured goods and components designed to have specific forms. More specifically, "articles" refers to equipment and devices, electronics parts, paper products and packaging materials.

2. The basic communication sheets recommended by JAMP to provide information on chemical substances contained in products.

3. For more details, please refer to the page at:
<http://www.ricoh.com/environment/info/2009/jamgpp.html>

4. <http://www.biz.jemai.or.jp/JAMP-GP/about/> (Japanese)

Communication system developed by JAMP to communicate information on chemical substances contained in articles



AIS (Article Information Sheet)

AIS is a communication sheet that JAMP standardized for providing information on chemical substances contained in articles. JAMP recommends using the sheet to deliver to downstream manufacturers data related to articles, including mass, material, and parts (in which part of the article the chemical substance is used). Data on regulated substances should also be included if contained in articles, including content level, name, content amount and concentration.

The downstream manufacturers receive MSDS or MSDSplus, which are also JAMP communication sheets, from upstream manufacturers that include information on chemical substances involved in their processes. The downstream manufacturers process the obtained data, reflecting changes in substances caused

by their manufacturing process, and convey the revised data using an AIS to the manufacturers further down the stream. An AIS for an article built up of multiple components can be prepared by integrating every AIS for each component. The purpose of the AIS is to convey information on regulated substances that might remain in finished articles above the permissible level, along the entire supply chain from upstream to downstream. This is a key tool—combined with MSDSplus and component AIS, which can be integrated into one for an article consisting of multiple components—to complete the chemical substance information communication system proposed by JAMP for extended usage across industries and business types.

Chemical substance control for supplies

<Ricoh Group (Global)>

Various chemical substances are used in supplies, including toner and developer. Based on the belief that “product safety is a basic condition for customer satisfaction,” the Ricoh Group ensures the safety of its supplies through appropriate chemical substance controls. We use an information system called RECSIS¹ to evaluate safety. Depending on the type of product, we set items for which safety should be confirmed, create MSDS², evaluate new chemical substances, check on the method of treatment and disposal, consult the relevant laws and regulations, and prepare safety specification data for products. RECSIS can also be used to make automatic safety judgments by referring to the laws and regulations of different countries as well as Ricoh’s standards for the chemical substances contained in supplies.

Using the RECSIS raw material database, we started the pre-registration process under the REACH Regulation³ in fiscal 2008. The system will be used to comply with future regulations that could require tracking of the quantity data of each applicable chemical substance.

1. Ricoh Environmental & Chemical Safety Information System

2. Material Safety Data Sheet

3. See page 34.

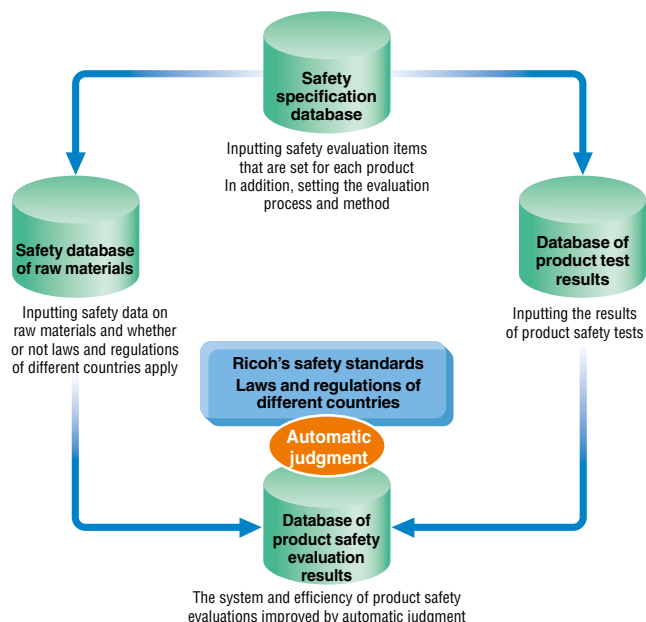
Reduction in environmentally-sensitive substances generated while in use

<Ricoh Co., Ltd. (Japan)>

Ricoh has established its own standards on chemical emissions* generated by products while in use and endeavors to reduce these emissions. Chemical substances emitted by products like copiers and printers are measured at the emission-measuring testing laboratory located within the company. Ricoh is certificated as an official testing laboratory by Germany’s BAM (Bundesanstalt für Material-forschung und -prüfung; Federal Institute for Materials Research and Testing), and measurement data from Ricoh’s testing laboratory will be recognized in registering for the Blue Angel, a German environmental label.

* Chemical emissions are chemical substances emitted by products and include ozone, dust, and volatile organic compounds (VOCs).

Safety evaluation system for supplies



Emission-measuring testing laboratory
(Ricoh Ohmori Office)