

Control of Chemical Substances and Reducing Their Use

Casio observes laws and regulations on chemical substances, exercises proper management of them, and endeavors to reduce the use of those that are potentially harmful.

Risk Management and Reduction Policy for Chemical Substances

Risk management of chemical substances can be divided into the control of chemical substances used during the production process and the control of chemical substances included in products.

1. Risks from chemical substances used during the production process are:
 - Health effects to people engaged in product manufacturing
 - Health and environmental effects to neighborhood residents and the local area
2. Risks from chemical substances included in products are:
 - Health effects to customers while using the products
 - Environmental effects after the products are disposed

Casio controls these chemical substances appropriately and is striving to replace them with chemical substances that have lower risks.

Control of substances subject to Japan's PRTR Law

Casio uses 16 substances subject to Japan's Pollutant Release and Transfer Register (PRTR) Law. The Electronic Components business uses 14 of these chemical substances, accounting for 99.7% of Casio's usage.

Casio Micronics case study

Laws and regulations that must be complied with for purchased materials with an A or B classification (based on investigation)

No.	Product	Environmental classification	CAS #	Applicable laws
1	○○○	A	7439-92-1	RoHS Directive
2	○○○	A	7439-92-1	RoHS Directive
3	○○○	B	7664-93-9	Industrial Safety and Health Law

A: Restricted substances
 B: Substances to be reduced
 C: Substances to be controlled
 E: General substances

Chemical substances control system

Environmental control No.	Division classification	Product	Material code	MSDS	Chemical substance inclusion research sheet	Compliance manual by laws and regulations	ICP data	Catalogue	Non-inclusion guarantee
0001	B	○○○	123	○	○	○	○	—	—
0002	B	△△△	456	○	○	○	○	—	—
0003	B	◎◎◎	789	○	○	○	—	—	—

Amounts of PRTR-controlled chemical substances handled, released, and transferred in fiscal 2006

(Unit: Tons)

Class 1 designated chemical substance	Substance No.	Sites using 1 or more tons of the substance	Amount handled	Amount released		Amount removed	Amount transferred	Amount consumed	Amount recycled
				Atmosphere	Public waters				
2-Amino ethanol	16	2	36.75	0.07		13.61	2.56		20.51
Antimony and its compounds	25		0.3				0.3		
Bisphenol A epoxy resin	30		0.05					0.05	
Ethylbenzene	40	1	9.38	4.12			3.88		
Ethylene glycol	43	1	4.36				4.36		
N,N-Dimethylformamide	58		0.18	0.07			0.11		
Xylene	63	1	42.23	20.36			21.87		
2-Ethoxyethyl acetate	101	3	17.42	10.16			7.26		
Organotin compounds	176	1	5.51				5.51		
Theouria	181	1	30.54				30.53		
Water-soluble copper salt	207	1	47.99	0.01	0.12				47.86
Toluene	227		0.37	0.2			0.17		
Lead and its compounds	230		0.46					0.44	0.02
Nickel compounds	232	1	1.2				1.2		
Hydrogen fluoride and its water-soluble salts	283	1	8.18	0.04	1.59		6.54		
Octylphenyl ether	308	1	3.65				3.65		
Total			208.57	35.02	1.71	13.61	87.94	0.49	68.39

The Electronic Components business receives a high number of requests for chemical controls from customers.

In November 2005, Casio Micronics built a unique system for disclosing information on the control of chemical substances in order to respond to such requests. In this system, chemical substances included in products to be delivered to customers and those included in materials used during the manufacturing process were divided into four categories (A, B, C, and E) based on the level of control, and then investigated. The investigation results were then used to enter information on the control of chemical substances on the Casio Micronics Website.

Furthermore, in February 2006, the company built a chemical substances control system that enables information on the control of chemical substances to be entered into Casio Micronics backbone management system, AS 100. This move made it possible to efficiently understand and monitor the usage of individual chemical substances included in entered materials as well as applicable laws and regulations.

Storage and treatment of PCB-containing equipment

Casio is storing PCB-containing equipment (19 high pressure condensers and 258 small ballasts) according to legally prescribed methods at the Hamura R&D Center, Hachioji R&D Center, and Kofu Casio (head office).

The 13 high pressure condensers and all 258 small ballasts stored at the Hamura R&D Center and Hachioji R&D Center are scheduled to be properly disposed of by fiscal 2008, as regional sites of the Japan Environmental Safety Corporation open. The six high pressure condensers stored at Kofu Casio (head office) are scheduled to be properly disposed of by fiscal 2009 as regional sites open.

Phase-out and registration of hazardous substances

Casio completed its compliance with the EU's RoHS Directive by the end of 2005.

Going forward, Casio will work to phase out and register hazardous substances in compliance with J-Moss (a directive requiring a mark to be placed on products that contain more than a certain content rate of specific chemical substances), which became mandatory with Japan's revised Law for the Promotion of Effective Utilization of Resources. It will do the same to comply with laws and regulations on lead, cadmium, mercury, and hexavalent chromium in North America and China equivalent to the RoHS Directive, as well as the REACH Regulation.

Dealing with asbestos

In fiscal 2006, Casio conducted studies into asbestos that can become airborne at company-owned buildings in Japan. Asbestos that can become airborne was found at four sites (Hamura R&D Center, Kofu Casio (head office), Casio Hitachi Mobile Communications, and the Health Resort at Yugawara). However, no airborne asbestos above regulatory limits was found at any of the sites.

Casio will finish safely removing the asbestos from these four sites by the end of 2006.