

Supply of green products

P16 CSR policy 2, 5

• Raising the ratio of green product registration*

2008 Result: Registration ratio: 87%

(Target: 85% and above)

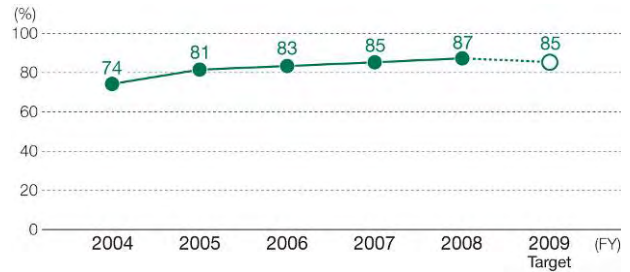
2009 Target: Registration ratio: 85% and above

Since 1999, the Hitachi Chemical Group has been conducting Green Product Assessment to reduce the environmental impact of products at each stage of their life cycle. Led by the Green Product Development Promotion Committee, we assess our products during design, testing and mass production processes, based on eight criteria designated for individual product types.

In fiscal 2008, the ratio of green product registration*

reached 85% on a non-consolidated basis and 87% on a consolidated basis.

Ratio of green product registration (consolidated)



In fiscal 2009, we will continue our efforts to develop products that reduce environmental impact throughout their life cycle.

* **Ratio of green product registration**: Ratio of the sales of green product against total sales excluding products that do not allow for our own voluntary environmental consideration (customer specification products, OEM products, purchased products, etc.).

Examples of green products

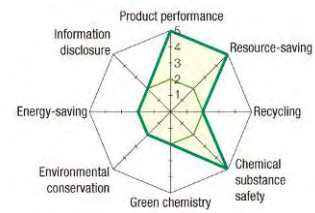
Cute Series ultrathin printed wiring board material

This halogen-free, ultrathin material for multilayer printed wiring boards can be used for lead-free processes.

The combination of a new low-elasticity thermosetting resin and ultrathin glass simultaneously achieves low elastic modulus and heat resistance. The material also exhibits outstanding dimensional stability. Because it can be folded for stereoscopic layout, the material facilitates miniaturization and enhances the functionality of portable devices and medical equipment, among other applications.



Folding a wiring board that uses Cute



LL Series valve-regulated lead acid batteries with a long cycle (Shin-Kobe Electric Machinery Co., Ltd.)

These long-life products improve endurance by using high-density, high-intensity storage material for the positive electrode and a highly corrosion-resistant alloy for the collector.

They also aid in the development of new energy and energy-saving systems, including power supplies for photovoltaic/wind power generation output, which tends to fluctuate, and electric-load leveling systems that use nighttime power.



LL Series



● **Environmental efficiency evaluation of contribution to environmental load reduction by customers**

The Hitachi Chemical Group is working to reduce environmental impact throughout the life cycle of its products. As part of this effort, we have been utilizing the “Environmental Efficiency” index since fiscal 2005 to measure product value created while controlling environmental impact and resource consumption. We have assessed 29 products as of fiscal 2008.

In fiscal 2008, we initiated an effort to evaluate our contribution to reducing environmental impact on the user (customer) side of our products. We will continue these efforts with the goal of introducing Life Cycle Assessment (LCA) methods.

Appropriate control of hazardous chemical substances

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The approach to regulating chemical substances in products is shifting worldwide from managing toxic substances, as represented by the ELV and RoHS directives, to ensuring safety through risk management, as represented by the REACH*¹ Regulation. As a result of this shift, the Chemical Substance Control Law is now under consideration in Japan, and individual countries are seeking to harmonize the labeling for hazardous properties of chemical substances in line with GHS*². The Industrial Safety and Health Law of Japan was also revised to require information disclosure in MSDS and on labels based on GHS Classification.

The Hitachi Chemical Group is working to enhance product safety by eliminating and reducing the use of hazardous chemical substances, developing alternative product technologies, reinforcing its administrative system and building a support system as part of its responsibilities as a company that handles chemical substances, while promoting access to data through the global supply chain and providing fair and accurate information (see p. 25).

*1 REACH (Registration, Evaluation, and Authorization of Chemicals) Regulation: EU law under which all chemical substances are registered by use and assessed for risk; only those products confirmed to be safe may be imported and used while high risk items are subject to approval and restriction.

*2 GHS (Globally Harmonized System): Universal guidelines for standardizing information on MSDS (Material Safety Data Sheets) and labels to enable stakeholders who handle chemical substances in the supply chain to understand the hazardous properties associated with those substances.

Preventing pollution from chemical substances

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● **Reducing emissions of chemical substances into the atmosphere**

2008 Result: 9% of 2000 levels (Target: 11% or less)	2009 Target: 10% or less of 2000 levels
VOCs: 9% (Target: 15% or less)	VOCs: 12% or less

The Hitachi Chemical Group is systematically working to reduce the use and atmospheric emissions of 480 substances identified in a PRTR survey conducted by the Japan Chemical Industry Association, including 354 substances subject to the PRTR Law. We also voluntarily control 7 substances including acetone and methyl ethyl ketone, not subject to this law, to curb their release into the atmosphere considering their significant emission volume.

Under the revised Air Pollution Control Law, we reported on our large drying facilities that handle volatile organic compounds (VOCs) and have been monitoring the allowable concentration at their exhaust outlets. We are also working on reducing our output of 41 substances that are released in greater volumes (more than 90% of the Group’s total VOC emissions).

In fiscal 2008, exhaust-gas treatment equipment we installed the previous fiscal year started to function as designed, and we replaced some raw materials covered by the PRTR Law with substances not subject to this law. The release of chemical substances into the atmosphere was reduced to 6% of 2000 levels on a non-consolidated basis and 9% on a consolidated basis, or 324 tons and 581 tons respectively.