

Supplying Green Products

Targets for 2004

Ratio of green product sales:
70% or more

Results for 2004

Non-consolidated: 76% **target achieved**
Consolidated: 73% **target achieved**

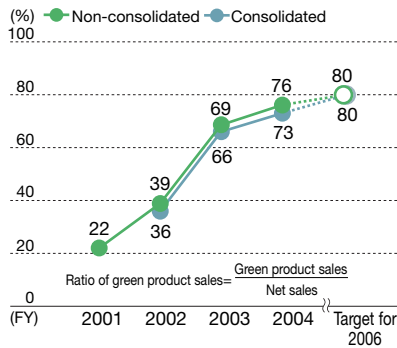
Targets for 2005

80% or more

Carrying out an assessment to promote development of green products

The Hitachi Chemical Group promotes development of products with less environmental impact in all stages of the product life cycle. In the Group, the Product Safety Committee carries out green product assessment in each process of product design and mass production, based on the Program for Assessing and Registering Green Products formulated in 2001.

Ratio of green product sales



Focusing on environmental impacts of products including when used and disposed of

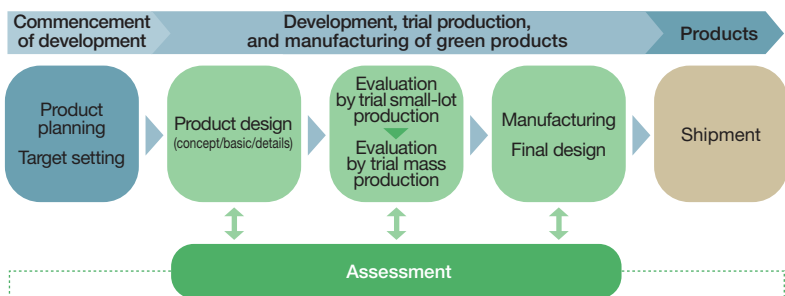
The Hitachi Chemical Group endeavors to achieve total abolition or reduction of hazardous chemical substances (hexavalent chromium, lead, etc.) in the products in order to minimize the influences as much as possible on the human body when used or on environmental pollution when disposed of. To respond to the customers' requirement for green procurement, an environmental laws and regulations representative was appointed in the CSR Office of Hitachi Chemical in 2004 to accelerate the green procurement initiative.

Recently, environmental laws and regulations, along with restrictions on inclusion of hazardous chemical

substances, require disclosure of environmental information.

To be compliant with such restrictions, manufacturers must monitor the management system of the suppliers. The Group is currently establishing an information collection/management system based on the life cycle assessment (LCA) from the viewpoint of the production process fulfilling environmental CSR. To supplement this system, it also promotes establishment of the Comprehensive Control System for Chemical Substance, which enables to respond to customers' requirements for green procurement and to prevent an accident or to promptly handle accidents caused by the products, as well as its application to group companies.

Assessment for Green Products



Eight criteria are evaluated for each product category. If points of all eight criteria are two or above out of five points (max) and either the average is three or above, or any of the criteria is the full mark, then the product is defined as green.

Electronics- and Chemical-Related Products

Criteria for evaluation	Evaluation items
Product functionality	Higher functionality per unit of resource
Resource saving	Reduction of resource consumption
Resource recycling	Recycling of resources and a recycle-based society system
Chemical safety	Reduction of risks to human health and consumption of hazardous substances
Green chemistry	Reduction of the environmental impacts in the production processes
Environmental conservation	Reduction of the environmental impacts
Energy saving	Energy saving in manufacturing processes and in use
Information disclosure	Provision of information about disposal and waste treatment

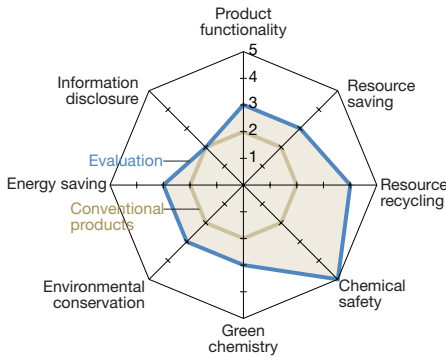
Housing Equipment and Environmental Facilities

Evaluation criteria	Evaluation items
Reducing weight	Resource saving, downsizing, weight reduction and standardization
Longer service life	Durability, reliability, and ease of repair/maintenance
Reuse and recycling	Use of recycled materials
Ease of disassembly	Ease of disassembly and separation
Ease of processing	Ease of crushing and decomposition
Environmental conservation	Reduction of the environmental impacts
Energy saving	Energy saving in manufacturing processes and in use
Information disclosure	Provision of information about disposal and waste treatment

Examples of Green Products

Electronics-Related Products

Photosensitive Dry Films for Printed Wiring Boards

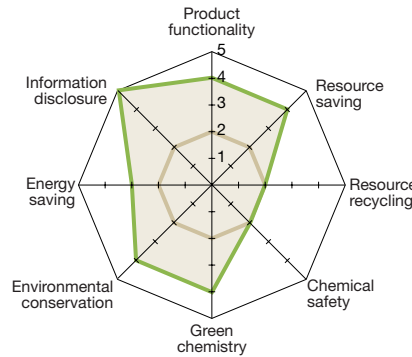


Photosensitive dry film for printed wiring boards is a resist film and material affixed to copper-clad laminate to make the circuits used for such boards incorporated in PCs or mobile phones.

It has superior tenting and adhesive properties and, therefore, reduces cracks and disconnections and contributes to improvement in yield. The thinness of the product (25 μm or less) realizes resource and energy saving, and reduction of packaging materials is also pursued. In the global market, it occupies approximately 32% as a film for circuit creation and 55% (commanding the largest share) as an overlay.

Chemical-Related Products

GSO Single Crystal Scintillators



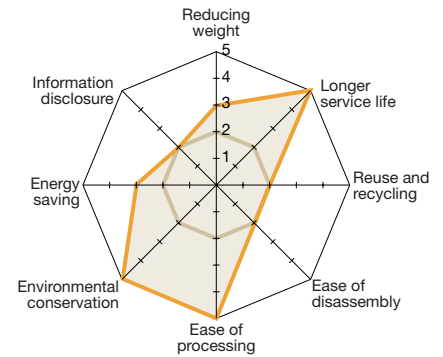
Gadolinium Silicon Oxide (GSO) is a material that emits light at high speed and high output when radiation like gamma ray enters. It is used as a scintillator in PET* scanners. Its superior energy resolution, fast decay time, large light output support quick and high precision radiation detection.

As GSO is chemically stable and therefore does not easily deteriorate, there is less needs for replacement even after long-term use and reduces waste generation. In addition, temperature change does not trigger much change in properties, and it means no temperature control is required in the room where PET is installed, reducing power consumption.

* PET (positron emission tomography): Medical imaging equipment that detects cancer in the entire body. The adoption of high-performance GSO enabled quick and accurate detection.

Housing Equipment and Environmental Facilities

Natural Refrigerant (CO₂) Heat Pump Water Heaters



Natural Refrigerant Heat Pump Water Heater absorbs heat from the atmosphere, conveys it to CO₂, natural coolant that carries heat, raises its temperature by compression and boils water using the heat. As it does not require combustion-like gas or petroleum-fueled water heaters, its ozone depletion potential is zero and global warming potential is reduced to one 1,700th compared with the conventional heat pump using a chlorofluorocarbon substitute. Downsizing and weight reduction of the components used and optimized layout of components resulted in the reduced number of piping materials and reduced weight of components, easing separation of packaging materials as well.

CSR Management

In the Market

For the Global Environment

With Employees

In Society