



Taking care to prevent impact on the environment

The use of lead, hexavalent chromium, and other chemical substances is controlled to prevent serious impact on the environment.

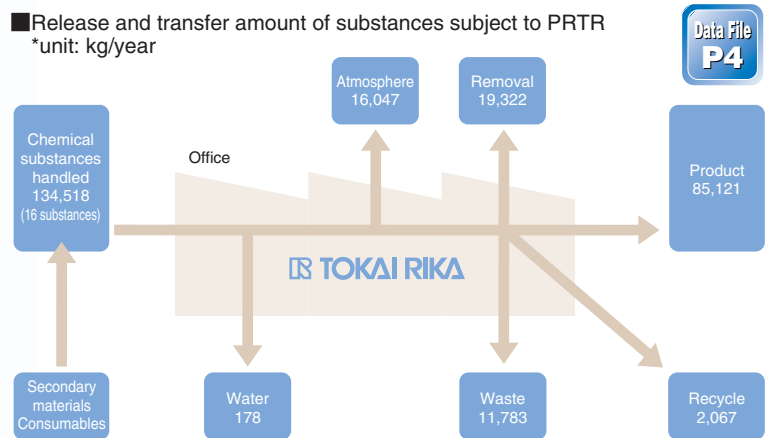
Product manufacturing that reduces the burden on the environment

To reduce the burden on the environment, Tokai Rika develops products that do not use substances (hexavalent chromium, lead, etc.) that have an adverse impact on humans and ecosystems, and it carries out exhaustive control of substances used in products in all stages from design to disposal.

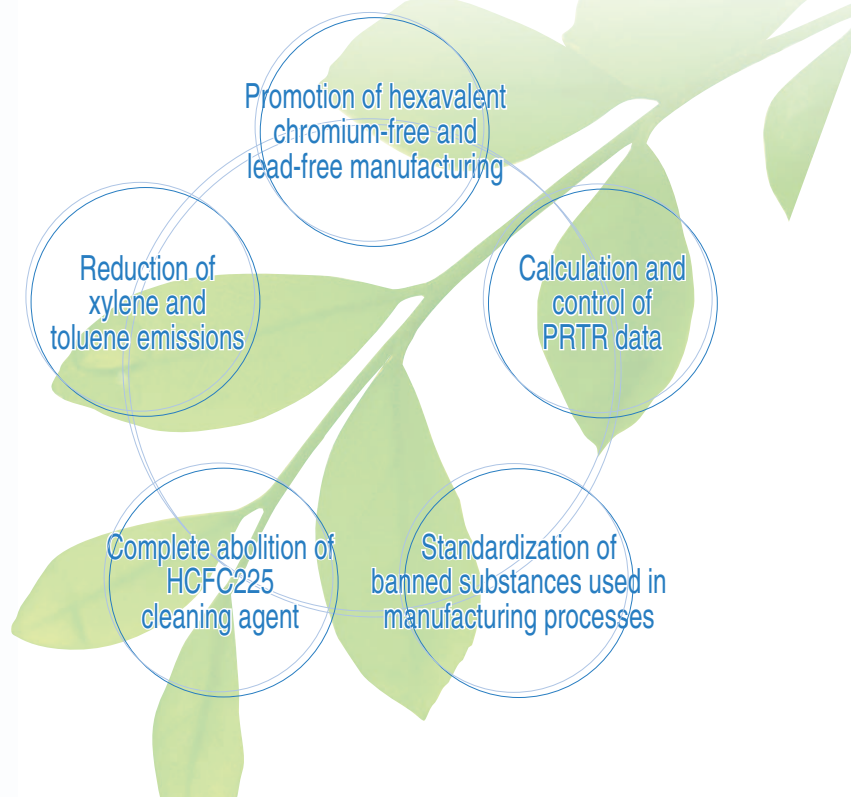
● Exhaustive control of substances that put a burden on the environment

We at Tokai Rika use a database system called IMDS (International Material Data System) that enables us to monitor substances (including those subject to the PRTR <Pollutant Release and Transfer Register Law>) contained in parts and products procured inside and outside the company, and we are implementing exhaustive control of substances that put a burden on the environment throughout the whole life cycle of products.

■ Release and transfer amount of substances subject to PRTR
*unit: kg/year



● Main activities



■ Mid-term target

June 2006
Total abolition of hexavalent chromium
From July 2005 on
Changed to lead-free solder for new products

Emission of substances subject to PRTR

To be reduced
55%
from 2000 level
by the end of 2010
(13 tons)

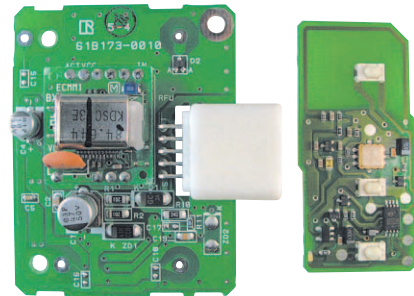
● Approach to hexavalent chromium-free and lead-free manufacturing

Tokai Rika promoted changeover to products containing no hexavalent chromium, with primary emphasis placed on our main products such as seat belts and key cylinders. Similarly, we are currently developing substitution technologies for black chromate on zinc plating containing hexavalent chromium, and are evaluating and testing them on actual products. With respect to lead, we have been using lead-free reflow soldering* since July 2003.

*Reflow soldering

A soldering method in which solder is first placed on a substrate and then heated to create a bond.

■ Reflow soldering



■ Changeover to products with trivalent chromium coating (Seatbelt: Mass-produced from January 2005)



■ Black trivalent chromating



● Reduction of VOC contained in products

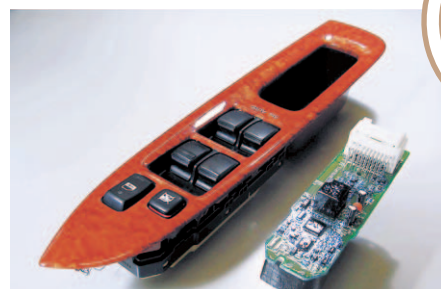
Tokai Rika encourages the reduction of VOC's (volatile organic compounds), which cause sick house syndrome. In 2004, we established substitute technologies for polyacetal resin (which generates formaldehyde) and moisture-proof coats (containing toluene and xylene) for substrates, and some of these technologies have been put into practical use since January 2005. We also established technologies for analyzing and measuring VOC quantities.

■ Example of products that use VOC-reduced materials (put into practical use in January 2005)



Formaldehyde reduced by 80%

■ Example of products that use substitute solvents (scheduled to be put into practical use in 2005)



Zero toluene and xylene

● Reduction of substances subject to PRTR

For substances subject to PRTR, we abolished the use of CFS substitutes for cleaning by eliminating the substrate cleaning process, and we achieved improvements such as changing both the active ingredients and diluting agents of moisture-proof chemicals to chemicals that do not contain any xylene or toluene. This enabled us to reduce the amount of substances we handle that are subject to PRTR by 135 tons and emissions by 16.2 tons over the previous year.

