Product Quality and Safety

Provide safe, highly reliable products by striving to enhance management systems for product quality assurance and safety, and disclose appropriate information.

Basic Approach

To live up to its “quality first” and “customer first” commitments, Toray Group has established policies on quality assurance and product safety, respectively, and an organizational framework to pursue both in an integrated manner. Specifically, the Quality Assurance Committee deliberates on basic policies and other matters, while the Quality Assurance Planning & Administration Department and the Product Safety Planning & Administration Department of the Quality Assurance Division plan and propose measures. Additionally, Toray Group supplies product safety information in accordance with the characteristics of the product or service. The Group is fundamentally committed to respecting the Eight Basic Consumer Rights and strives to secure the quality and safety of its products throughout its business activities.

The Medium-Term Management Program, Project AP-G 2022, directs Toray Group to pursue resilience and proactive management to achieve growth, and this hinges on securing product safety and quality. The Group continued to address individual areas for improvement and execute product safety measures in fiscal 2021. However, in fiscal 2021, Toray Industries, Inc. announced that inappropriate actions at Toray related to certification of certain resin products by Underwriters Laboratories (hereinafter, “UL”), a global third-party safety science organization headquartered in the United States, had taken place. This fact was announced on January 31, 2022, and on the same day, the Company formed an expert committee to conduct a thorough investigation and study the root cause. On April 8, the Company received the committee report that sets out the findings of the investigation along with recommended measures to prevent recurrence.

In response to this situation, Toray Group is focused on further strengthening compliance and is doing its utmost to prevent recurrence and restore trust in the Group.

> For more information on the Toray response to this matter, please refer to:
  Response to Inappropriate Actions Relating to UL Certification in the Toray Resins Business
Toray Group Quality Policy  Revised June 2007

We give top priority to the product quality offered to our customers as well as to safety and to the environment in our corporate activities. We work on quality assurance with the stance of "Customer First."

1. We make our best efforts to meet our customers’ expectations with products and services of high satisfaction.
2. We commit ourselves to abide by the "Quality First" principle, and to improve the quality and reliability of our products, in all our divisions, including sales, manufacturing and research and development.
3. We meet quality requirements at the stage of design and development, and ensure and enhance these in the manufacturing process.
4. We continuously strive to organize, maintain and improve our quality management system.

Product Safety Management Basic Policy  Established January 1992

1. We shall place priority on the various measures required to ensure product safety.
2. We shall conduct adequate safety evaluations prior to marketing a new product.
3. For products already on the market, we shall take note of feedback from customers and the general public and always remain attentive to safety.

Related Information

See the following page for information on chemical substance management.
> Safety, Accident Prevention, and Environmental Preservation

Structure

Framework for Quality Assurance

The quality assurance framework of Toray Industries, Inc. is shown in the diagram below. The Quality Assurance Managers Council promotes and implements the annual group-wide quality assurance themes that are established by the Quality Assurance Committee. Quality assurance and product safety committees at divisions further examine the company-wide issues that have been identified by the Quality Assurance Managers Council, breaking them down into action items that are designated every year for implementation. Quality assurance, production, technology, and sales departments cooperate to tackle quality assurance issues and raise the level of activities.
Toray Industries’ product safety framework is shown in the diagram below. The Product Safety Secretariat Meeting promotes and implements the annual company-wide product safety themes that are established by the Quality Assurance Committee. Quality assurance and product safety committees at the divisions further examine the group-wide issues that have been identified by the Product Safety Secretariat Meeting, breaking them down into action items that are designated every year for implementation. The action items are executed in cooperation with quality assurance, production, technology, and sales organizations at the departmental and divisional levels, to ensure thorough management of product safety and continue raising the level of management. Toray Group has been centrally tracking statistics on product accidents and the execution of product safety reviews since fiscal 2011.
Framework for Product Safety

President

Quality Assurance Committee
- Propose, discuss, and decide important issues
- Report important issues

Quality Assurance Division
- Quality assurance divisions / departments of each business
- Quality Assurance Planning & Administration Department
- Product Safety Planning & Administration Department

Quality Assurance Division Council
- Discuss and decide measures
- Follow up progress for important issues

Product Safety Secretariat Meeting
- Discuss and decide specific measures
- Follow up on progress for product safety issues

Businesses

Quality assurance and product safety committees at divisions
- Tackle product safety issues
- Facilitate product safety activities at each business

Group companies

Product safety committees
- Tackle product safety issues
- Facilitate product safety activities at each company
Framework for Product Safety at Group Companies

Self-Inspections to Ensure Quality Assurance and Product Safety

Since fiscal 2016, Toray Group companies have been implementing self-inspections for quality assurance and product safety using the C-MOS internal control monitoring online system. Any issues that are identified through the self-inspections are corrected to ensure that improvements are made. The self-inspections are conducted on a three-year cycle to ensure that the basic frameworks for quality assurance and product safety are in place. For the first three-year cycle, Toray Industries was inspected in fiscal 2016, followed by group companies in Japan in fiscal 2017, and group companies outside Japan in fiscal 2018.

For the second three-year cycle implemented in fiscal 2019, Toray Group assigned inspection items to verify the effectiveness of improvements, with Toray Industries taking its turn to conduct self-inspections in fiscal 2019 followed by group companies in Japan in fiscal 2020 and group companies outside Japan in fiscal 2021.
CSR Roadmap 2022 Targets

### CSR Roadmap goals

1. Achieve zero product accidents
2. Enhance the group-wide framework for product safety and quality assurance

### Main Initiatives and Key Performance Indicators

<table>
<thead>
<tr>
<th>Key Performance Indicator (KPI)</th>
<th>Target</th>
<th>Fiscal 2020</th>
<th>Fiscal 2021</th>
<th>Fiscal 2022</th>
<th>Fiscal 2021 Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-❶ Number of product accidents</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>4-❷ Group companies implementing product quality assurance and safety education (%)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Reporting Scope: Toray Group

1. An incident occurred in which an electrically heated floor mat manufactured and sold by Toray some time between 1976 and 1983 overheated, causing flooring and other materials to burn. The ensuing recall has been ongoing since 2008, and Toray Industries has once again posted recall notices on our website and in national newspapers. This incident did not result in injury or harm to any persons.
2. An accident involving carbon fiber volleyball posts manufactured for non-general consumption and sold by a Toray Group company resulted in a broken arm. The net winder had been attached to a post in order to unwind the net when the aged winder gear, which had been worn down over time, caused the winder handle to spin in reverse, breaking a player’s arm. Each customer who had purchased the product was contacted and asked to perform the periodic inspections as described in the instruction manual.

- 197 -
Related Materiality for CSR

- Ensuring product quality and safety

Click here for a PDF summary of materiality-related CSR Roadmap 2022 main initiatives, KPIs and progress (PDF: 1.6MB).

Looking to the Future

In fiscal 2022 and beyond, Toray Group will address individual issues related to improving quality assurance and product safety, while continuing to enhance its group-wide management systems for both quality assurance and product safety.

In addition, with respect to the inappropriate actions regarding UL certification in the Toray resins business, Toray Industries has received recommendations in the report by the expert committee that investigated this matter and, guided by these recommendations, is implementing a series of measures to prevent recurrence.

For more information on the Toray response to this matter, please refer to:
Response to Inappropriate Actions Relating to UL Certification in the Toray Resins Business
CSR Activity Report (CSR Guideline Activity Reports) - Product Quality and Safety

Initiatives for Quality Assurance and Product Safety

Reinforcing Compliance in Product Quality Assurance

Toray Group is pursuing five major tasks to reinforce quality assurance compliance throughout the Group.

1. Reinforcement of structures related to quality assurance systems of the entire Toray Group
   Toray Industries provides guidance to its business sites and group companies around the world regarding the development of quality assurance frameworks and audits the effectiveness of these frameworks and the work done under them. The organizations clarify their vision for quality assurance and design initiatives to close the gap between the vision and actual performance.

2. Development of human resources and creation of workplace culture not allowing any misconduct
   Toray Group started implementing education on compliance in quality assurance during Quality Control month in November in fiscal 2020. Toray Industries provides training materials to its business sites and group companies around the world, while individual departments and companies are responsible for providing education for their employees. (A total of 20,395 employees received training in fiscal 2021.)

3. Review and adjustment of actual contracts with customers regarding quality (assurance)
   In accordance with guidelines for quality assurance agreements, Toray Industries is promoting ongoing efforts to thoroughly inspect and review agreements at its business sites and group companies around the world and is working to optimize contract provisions.

4. Appropriate maintenance and management of measuring devices
   Based on risk assessment sheets for evaluating the necessity of replacement or maintenance of measuring devices, Toray Industries and its group companies around the world create and implement plans to replace the devices appropriately.

5. Improvement of quality data management system to not allow any misconduct
   Toray Industries and its group companies around the world are developing data management systems that minimize human involvement, such as by automating measurement, transfer of measurement data, and issuance of inspection reports.
Toray Industries provides training every year for newly appointed department and section managers at the Company and its group companies in Japan. The training is designed to educate managers about quality assurance compliance and Toray Group's quality assurance and product safety initiatives. Moreover, since fiscal 2013, all group companies around the world have conducted original quality assurance and product safety training tailored to their operations.

Enhancing Product Safety Reviews

Toray Industries and its group companies implement product safety reviews for all products. In addition to addressing product safety, the reviews examine the adequacy of information provided to customers via, for instance, safety data sheets (SDS), labeling, and instructions. Products are also assessed for impact on the global environment. Special precautions are taken for new products that are highly original, as well as for products for which the safety considerations have changed significantly from previous products. For these products, a Product Safety Review Board comprised of neutral assessors with specialized knowledge is assembled to review the safety of the product. Toray Group also ensures that newly established group companies rapidly establish a framework for product safety and implement product safety reviews.
Product Safety Review Flow Chart (Toray Industries, Inc.)

1. At group companies in and outside Japan, this position is held by the president or a director.

- General manager of division or department of new product
  - 5: Approval to launch a new product

- Product safety managers (division managers, production managers, etc.)
  - 1: New product approval application
  - 2: Consult
  - 3: Advise
  - 4: Director in charge of technology and production

- Products
  - 6: Confirm safety of new product

- Product Safety Review Board
  - Review product safety

- Products manufactured by Toray
  - Products to be sold on the market, products manufactured on contract, products purchased for resale, and development prototype products
Number of product accidents

<table>
<thead>
<tr>
<th>Reporting scope</th>
<th>Target in fiscal 2021</th>
<th>Result in fiscal 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toray Group</td>
<td>0</td>
<td>2</td>
</tr>
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</table>

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Providing Product Safety Information

Toray Group provides customers with product safety information specifically tailored to the product or service.

1. Customer support lines
   In its efforts to create a convenient environment for customers, Toray Industries makes available toll-free numbers for customers to call and inquire about its mainstay consumer products such as home water purifiers and contact lenses.

2. Safety data sheets (SDS)
   Toray Group designates the duties, management framework, and procedures for SDS on products that are manufactured or sold by the Group, and provides customers with adequate information on the safe handling of Group products. SDS are disclosed online so that they are readily accessible to customers.

3. Product labeling and instructions
   Toray Group creates labels and instruction manuals (including catalogs) and provides them to customers only after clarifying the duties and management framework for product labels and instruction manuals, the procedures from creation to distribution, and other key processes.
Respecting the Eight Basic Consumer Rights

In providing products and services, Toray Group is fundamentally committed to respecting the Eight Basic Consumer Rights and strives to secure safety and quality of its products throughout the Group's business activities.

The Eight Basic Consumer Rights (Excerpted from the Consumers International website)

- The right to satisfaction of basic needs
- The right to safety
- The right to be informed
- The right to choose
- The right to be heard
- The right to redress
- The right to consumer education
- The right to a healthy environment

Click here for the main initiatives for CSR Guideline 4, “Product Quality and Safety” in CSR Roadmap 2022.
CSR Activity Report (CSR Guideline Activity Reports) - Product Quality and Safety

Sites with ISO 9001 Certification

Toray Group has established an appropriate quality management system at each manufacturing site and is working to strengthen its quality assurance system.

Sites with ISO 9001 certification (as of July 2022)

Toray Industries, Inc.: 11 plants
Shiga, Seta, Ehime, Tokai, Aichi, Okazaki, Mishima, Tsuchiura, Gifu, Ishikawa, Nasu

Group companies in Japan: 23 companies

Group companies outside Japan: 42 companies

USA
Toray Plastics (America), Inc., Toray Fluorofibers (America), Inc., Toray Membrane USA, Inc., Zoltek Companies, Inc.

Mexico
Toray Advanced Textile Mexico, S.A.de C.V.

UK
Toray Textiles Europe Ltd.

France
Toray Films Europe S.A.S., Toray Carbon Fibers Europe S.A.

Germany
Euro Advanced Carbon Fiber Composites GmbH, Greenerity GmbH
Italy

Czech Republic
Toray Textiles Central Europe s.r.o.

Netherlands
Toray TCAC Holdings B.V.

India
Toray Industries (India) Private Limited

Indonesia

Thailand
Thai Toray Synthetics Co., Ltd., Toray Textiles (Thailand) Public Company Limited

Malaysia

China

Republic of Korea
Toray Advanced Materials Korea Inc., STEMCO, Ltd., Toray Battery Separator Film Korea Limited.

Taiwan
Toray Advanced Film Kaohsiung Co., Ltd.

Click here for the main initiatives for CSR Guideline 4, “Product Quality and Safety” in CSR Roadmap 2022.