

CSR Activity Report (CSR Guideline Activity Reports)

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 2025, directs Toray Group to achieve sound, sustainable growth along with innovation and resilience management, and this hinges on securing product safety and quality. Accordingly, the Group continued to address individual areas for improvement and execute product safety measures in fiscal 2022.

In fiscal 2022, the Group also promoted measures to prevent any recurrence of past inappropriate actions related to obtaining certification for certain resin products from Underwriters Laboratories (UL).

- > [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](#)

Related Policies

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 management.

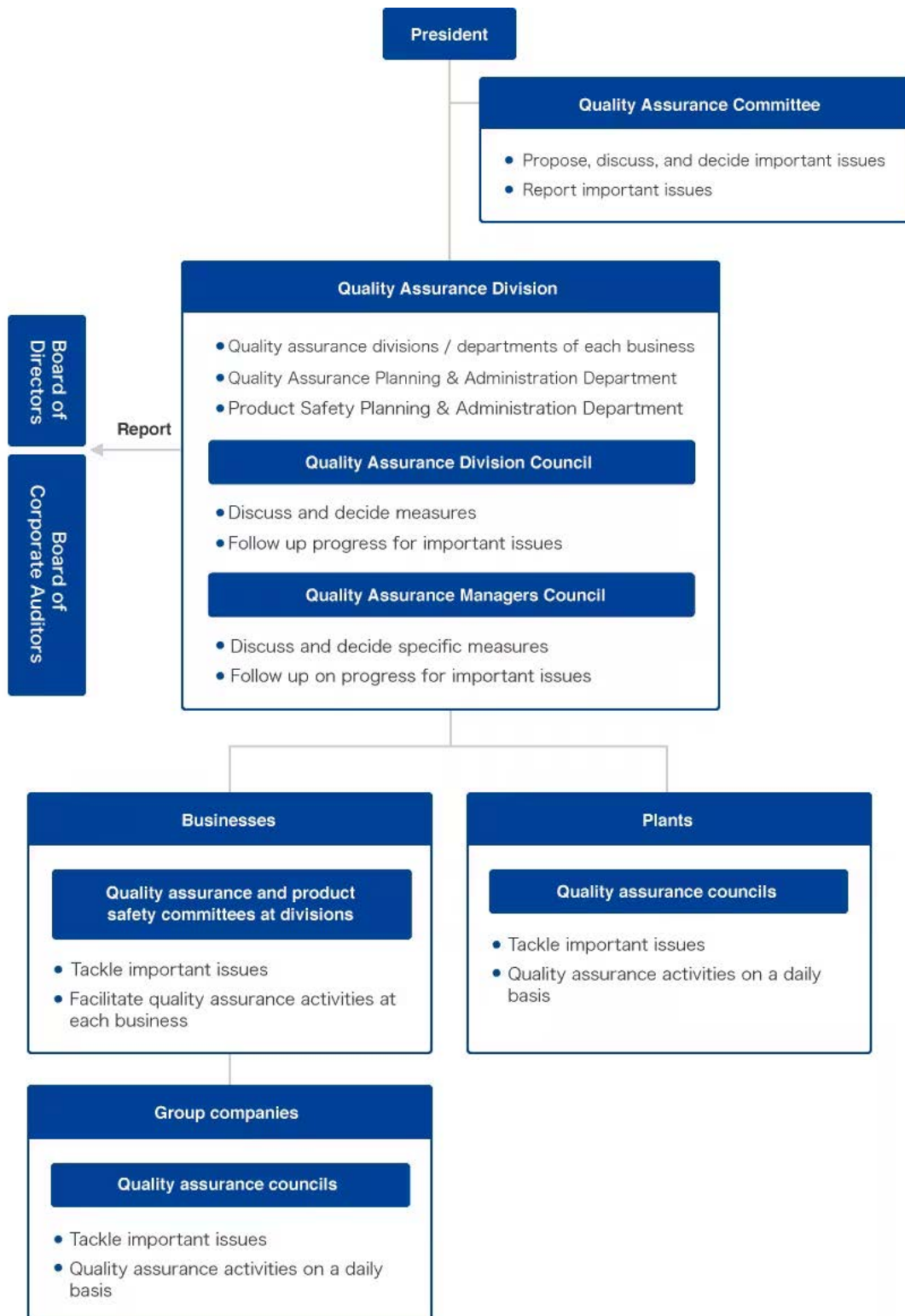
> [Chemical Management](#)

Structure

Framework for Quality Assurance

The quality assurance framework of Toray Industries, Inc. is shown in the diagram below. The Quality Assurance Division Council, which meets monthly, and the Quality Assurance Managers Council, which meets twice a year, raise awareness and promote improvements based on group-wide quality assurance themes 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 Division Council and 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.

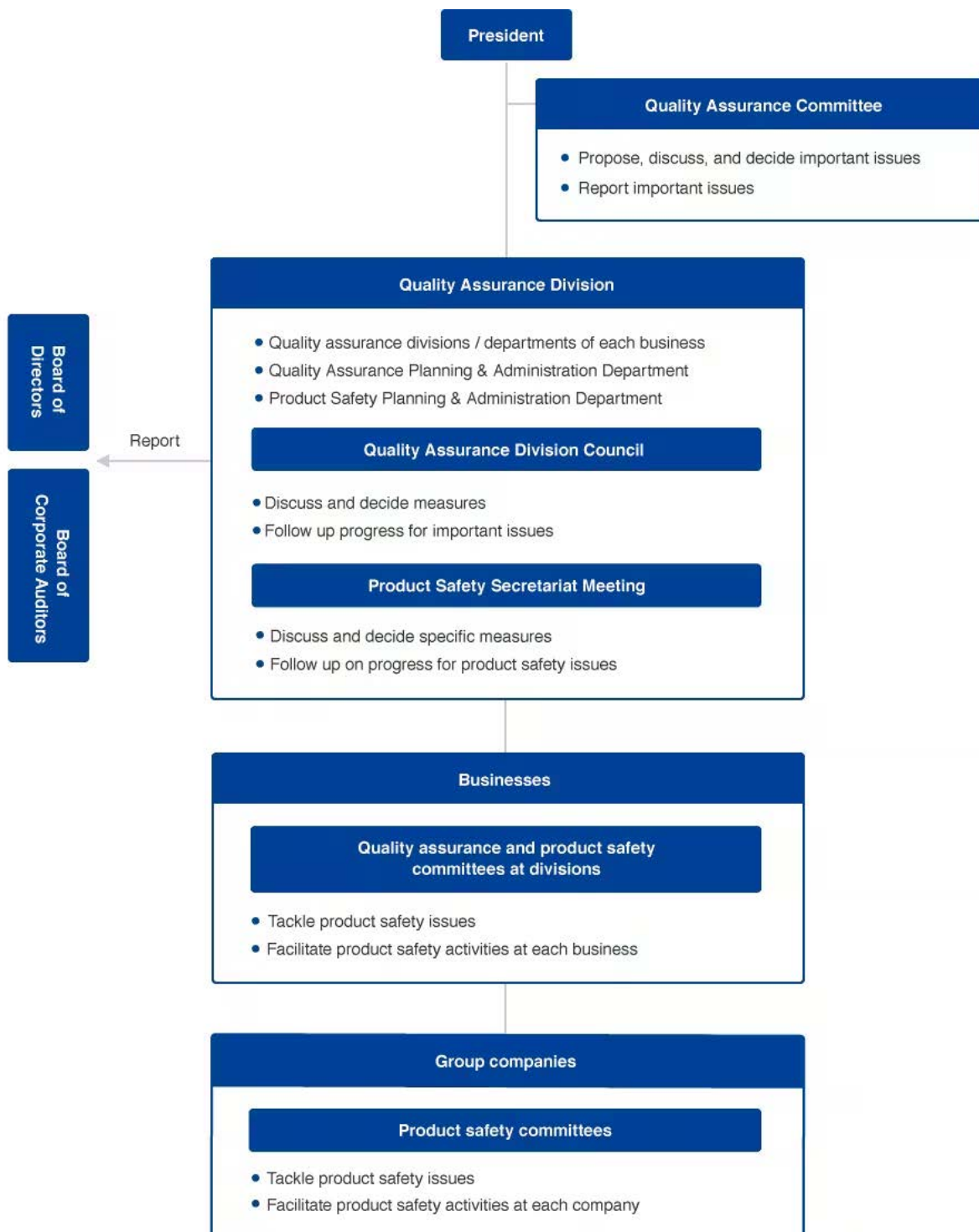
Framework for Quality Assurance



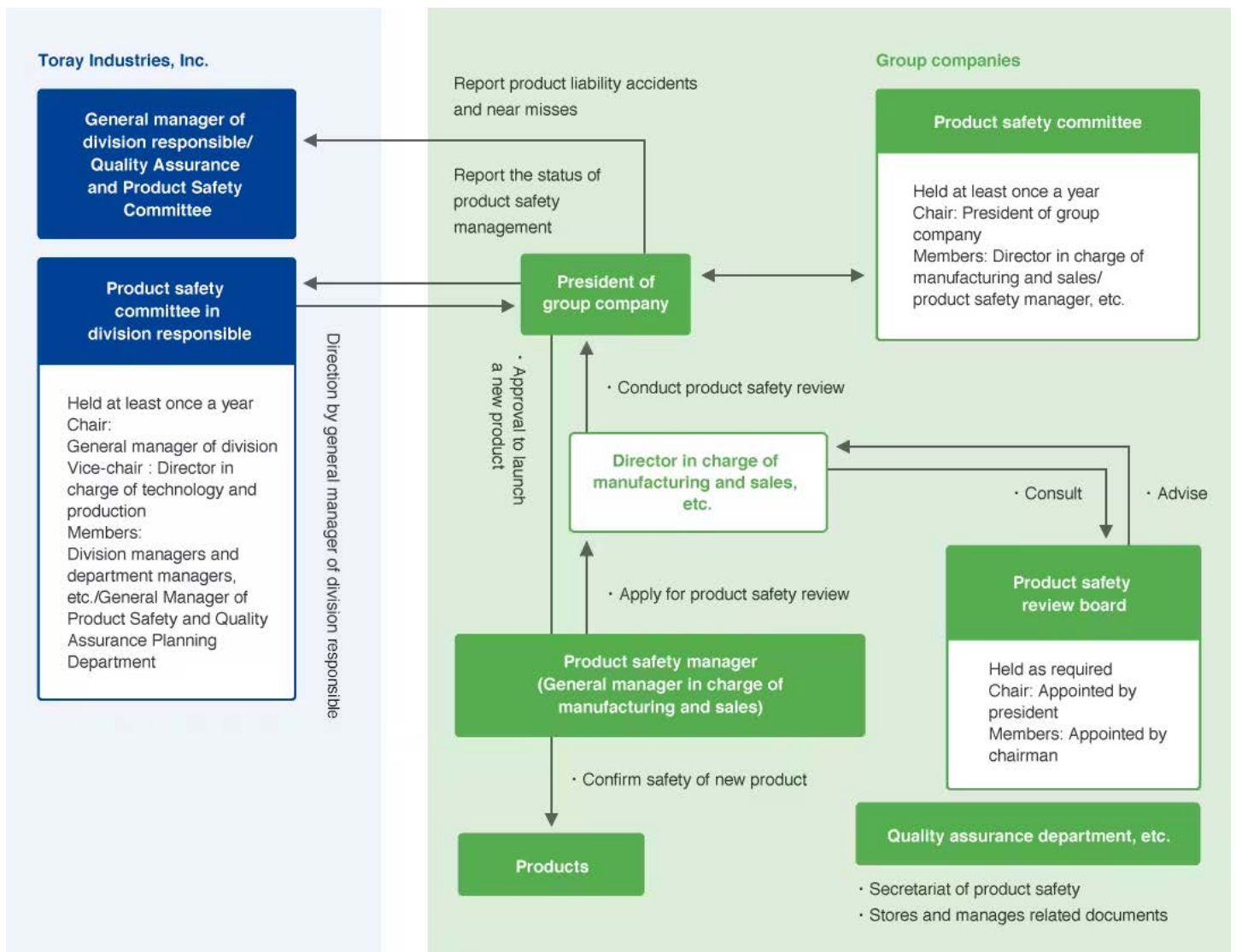
Framework for Product Safety

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



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, and self-inspections were conducted. For the third three-year cycle implemented in fiscal 2022, confirmation items for UL and other certifications were assigned, and Toray Industries conducted self-inspections in the same year.

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

	KPI
(1) Aim for zero product accidents	4-①
(2) Establish a system to audit effectiveness of improvement and continuity of Toray Group's overall quality assurance framework	-
(3) Introduce a group-wide quality control system with fraud prevention features	-
(4) Prepare and build a quality assurance system that covers quality assurance and quality control functions in each business	-
(5) Provide quality assurance and product safety education	4-②

Key Performance Indicator (KPI)	Target			Fiscal 2022 Result
	Fiscal 2020	Fiscal 2021	Fiscal 2022	
4-① Number of product accidents	0	0	0	1 ¹
4-② Group companies implementing product quality assurance and safety education (%)	100%	100%	100%	100%

Reporting Scope : Toray Group

1 An incident occurred in which a customer suffered a finger cut while unpacking processed yarn sold by Toray. The injury was caused by a box cutter blade stuck beneath packaging tape. The hazard originated in the product packaging area of an outsourced manufacturer(sales) site, when an employee failed to notice that a piece of broken cutter blade had become stuck to the tape used to seal the product package for shipping. To prevent this from happening again, Toray has prohibited its outsourced manufacturer(sales) from using this type of box cutter and has instructed them to improve check procedures during packaging.

Related Materiality for CSR

- Enhancing Product Quality and Safety

* Click [here](#) for the Materiality View of CSR Roadmap 2025 (PDF:392.4KB). [PDF](#)

* Click [here](#) for a PDF summary of the relationships between materiality, associated CSR Roadmap 2022 main initiatives, KPIs and progress achieved, up to fiscal 2022 (PDF: 1.6MB). [PDF](#)

Looking to the Future

In fiscal 2023 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](#)

Click [here](#) for the main initiatives and KPIs for CSR Guideline No. 4 “Product Quality and Safety” during the CSR Roadmap 2025 period (fiscal 2023–2025). [PDF](#)

CSR Activity Report (CSR Guideline Activity Reports) - Product Quality and Safety Initiatives for Quality Assurance and Product Safety

Reinforcing Compliance in Product Quality Assurance

CSR Roadmap 2022
Main Initiatives (1)(2)(3)(4)(5)

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**
After clarifying the required quality assurance framework for Toray Industries and its business sites and group companies around the world, the Company is providing guidance to relevant sites for quality assurance framework enhancement while closing the gap between the vision and actual performance.
Furthermore, the Company is working to strengthen its auditing function through audits by the deputy general manager of the Quality Assurance Division and mutual audits by Quality Assurance Departments, in order to better audit the quality assurance framework and its operational effectiveness.
- 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 23,918 employees received training in fiscal 2022.)
- 3. Review and adjustment of actual contracts with customers regarding quality (assurance)**
In accordance with Guidelines for Contracts/Agreements with Customers on Product Quality and Product Quality Assurance set forth at the time contracts are agreed, 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 the provisions in these contracts.
- 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.

Education and Training for Quality Assurance and for Product Safety

CSR Roadmap 2022
Main Initiatives (5)

Group companies implementing product quality assurance and safety education

■Reporting scope
Toray Group

■Target in fiscal 2022
100%

Result in fiscal 2022

100%

In addition to quality assurance compliance training conducted during Quality Month (November), Toray Industries promotes quality assurance and product safety training for newly appointed department and section managers at the Company and its group companies in Japan. It also provides education on quality assurance and product safety activities during company-wide technical training, as well as quality control (QC) training for frontline personnel. Toray is working to thoroughly raise awareness of the Group's quality assurance and product safety activities and improve its QC capabilities. Moreover, since fiscal 2013, all group companies around the world have conducted general training related to product safety, training for specific business operations, and internal rules training.

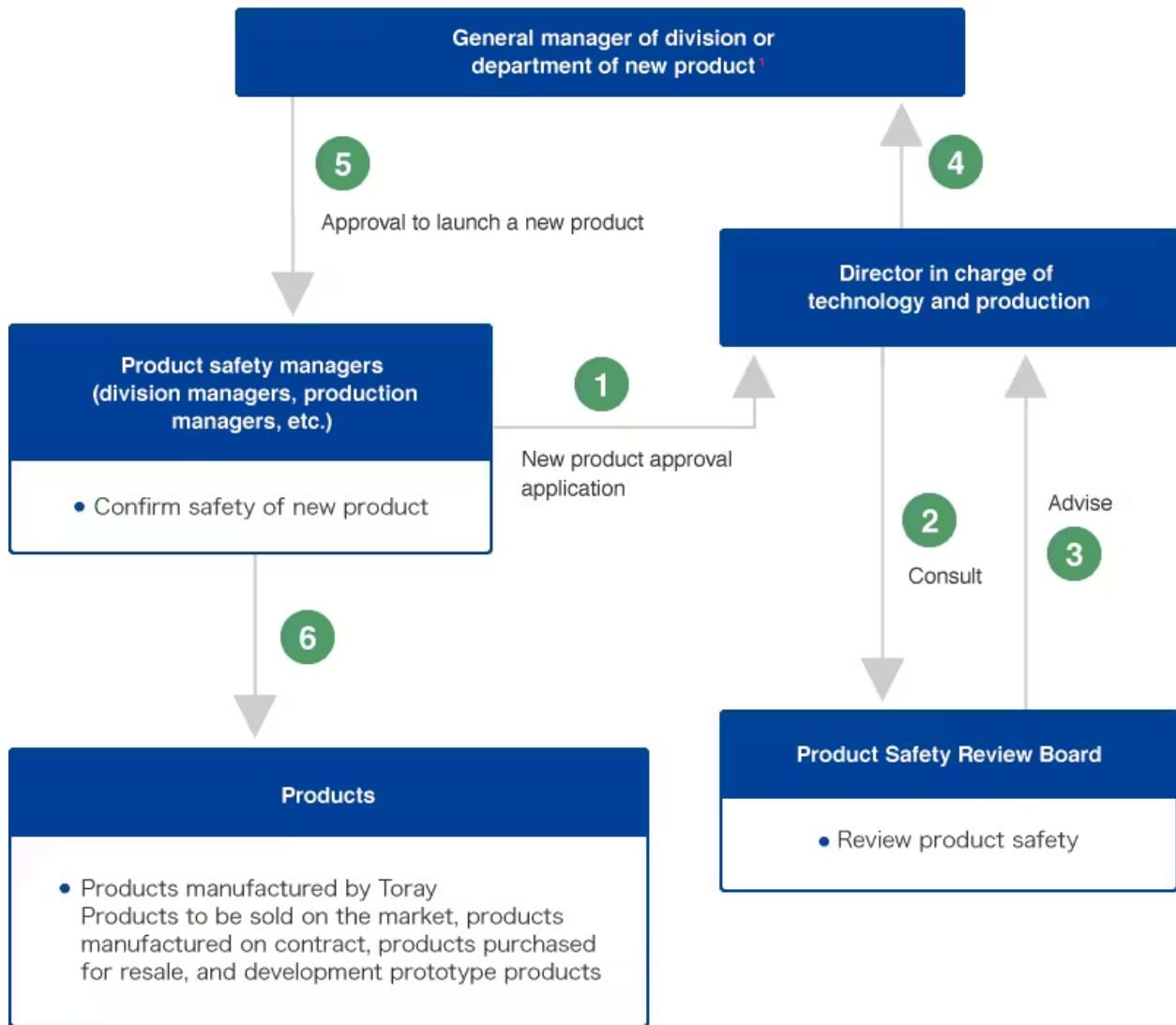
Enhancing Product Safety Reviews

CSR Roadmap 2022
Main Initiatives (1)(2)

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.

Implementing product safety reviews for all products

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

Preventing Product Accidents

CSR Roadmap 2022
Main Initiatives (1)

Number of product accidents

■ Reporting scope
Toray Group

■ Target in fiscal 2022
0

Result in fiscal 2022

1²

² An incident occurred in which a customer suffered a finger cut while unpacking processed yarn sold by Toray. The injury was caused by a box cutter blade stuck beneath packaging tape. The hazard originated in the product packaging area of an outsourced manufacturer(sales) site, when an employee failed to notice that a piece of broken cutter blade had become stuck to the tape used to seal the product package for shipping. To prevent this from happening again, Toray has prohibited its outsourced manufacturer(sales) from using this type of box cutter and has instructed them to improve check procedures during packaging.

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 advocated by Consumers International (CI)

- 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 May 2023)

CSR Roadmap 2022
Main Initiatives (2)

Toray Industries, Inc.: All 13 plants

Shiga, Seta, Ehime, Nagoya, Tokai, Aichi, Okazaki, Mishima, Chiba, Tsuchiura, Gifu, Ishikawa, Nasu

Group companies in Japan: 25 companies

Du Pont-Toray Co., Ltd., Toray Opelontex Co., Ltd., Dow Toray Co., Ltd., DuPont Toray Specialty Materials Kabushiki Kaisha, Toray Construction Co., Ltd., Toray Building Materials Co., Ltd., Toray Engineering Co., Ltd., Toray Precision Co., Ltd., Sowa Textile Co., Ltd., Toray Textiles, Inc., Toray Coatex Co., Ltd., Toray Amtecs Inc., Toray Monofilament Co., Ltd., Toray Hybrid Cord, Inc., Toray Plastics Precision Co., Ltd., Toray PEF Products Inc., Toray Fine Chemicals Co., Ltd., Soda Aromatic Co., Ltd., Toray Celanese Co., Ltd., Toray Advanced Film Co., Ltd., Toray KP Films Inc., Toray Carbon Magic Co., Ltd., Suido Kiko Kaisha, Ltd., Toray Research Center Inc., Toray Techno Co., Ltd.

Group companies outside Japan: 48 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.

Hungary

LG Toray Hungary Battery Separator Kft.

Germany

Euro Advanced Carbon Fiber Composites GmbH, Greenerity GmbH

Italy

Alcantara S.p.A., Composite Materials (Italy) s.r.l., Delta-Tech S.p.A., Delta-Preg S.p.A.

Czech Republic

Toray Textiles Central Europe s.r.o.

Netherlands

Toray TCAC Holdings B.V.

India

Toray Industries (India) Private Limited

Indonesia

P.T. Century Textile Industry Tbk, P.T. Easterntex, P.T. Indonesia Toray Synthetics, P.T. Acryl Textile Mills, P.T. Indonesia Synthetic Textile Mills, P.T. Toray Polytech Jakarta

Thailand

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

Malaysia

Penfibre Sdn. Berhad, Penfabric Sdn. Berhad, Toray Plastics (Malaysia) Sdn. Berhad, Toray BASF PBT Resin Sdn. Berhad

Saudi Arabia

Toray Membrane Middle East LLC

China

Toray Sakai Weaving & Dyeing (Nantong) Co., Ltd., Toray Fibers (Nantong) Co., Ltd., Toray Polytech (Nantong) Co., Ltd., Toray BlueStar Membrane Co., Ltd., Toray Plastics (Shenzhen) Ltd., Toray Plastics (Suzhou) Co., Ltd., Toray Plastics (Chengdu) Co., Ltd., Yihua Toray Polyester Film Co., Ltd., Toray Plastics Precision (Zhongshan) Ltd., Toray Film Products (Zhongshan) Ltd., Toray Membrane (Foshan) Co.,Ltd., Toray Fibers & Textiles Research Laboratories (China) Co., Ltd., Toray Advanced Materials Research Laboratories (China) Co., Ltd.

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.