



Fast Retailing

Chemical Management Guideline

-Version 2025 -

Revision history

Version	Revision description	Effective Date
2019	Initial release	10/05/2019
2020	Annual update	29/05/2020
2021	Annual update	31/05/2021
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Change log for the previous version

Modification	page
Inclusion of Performance InCheck requirement as minimum requirement	7,9
Inclusion of Verified InCheck implementation to targeted suppliers	9
Inclusion of Supplier to ZERO (StZ) program as a minimum requirement	11,12
Update ZDHC wastewater guidelines version to 2.2	14
Inclusion of third-party Root Cause Analysis (RCA) as a remediation measure to targeted factories	15

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Introduction

Chemical Management Policy

At Fast Retailing (FR), our vision is to become the world's No.1 digital consumer retail company. We cannot achieve our vision in good conscience unless we ensure sustainable business practices from an environmental and social point of view.

We defined Respect the Environment as our key issue under which we conduct our sustainability activities. As we reduce our environmental impacts, we also adopt innovative technologies to support a more sustainable way of doing business.

Chemical impact to people and the environment is a critical concern for FR and its supply chains, as well as for customers, making chemical management one of the areas of particular focus in the environmental area. In our product production process, we strive to prevent and reduce water and air pollution and to minimize environment harm through the careful management of chemical substances. With the cooperation of our partner suppliers, we ensure the safety of our customers and supplier employees.

Commitment and Initiatives

In 2013, FR publicly committed to zero discharge of hazardous chemicals from production processes and products. This means eliminating the release of hazardous chemicals¹ to protect consumers, workers and the natural environment using an approach based on the prevention² and the Precautionary Principle³.

Following the commitment, we publish restricted substances lists (RSLs) indicating the standards of restricted and/or prohibited substances for our products and production processes. We work with partner suppliers throughout the supply chain to replace hazardous chemical substances, conducting wastewater tests to find ways to improve the performance. We also disclose the final results in a timely and transparent manner.

For more information on our initiatives, please visit our website for reference.

<https://www.fastretailing.com/eng/sustainability/environment/chemical.html>

Purpose of the document

This guideline outlines the requirements and expectations that FR has for its suppliers in order for us to move towards our zero hazardous chemicals discharge goal. The guideline requires the selection of the proper chemical formulations, their safe use in the facility, and proper treatment of wastewater. We work with suppliers to develop trust, but this guideline also requires a level of verification to ensure chemicals are being managed properly.

¹ All hazardous chemicals mean all those that show intrinsically hazardous properties: persistent, bioaccumulative and toxic (PBT); very persistent and very bioaccumulative (vPvB); carcinogenic, mutagenic and toxic for reproduction (CMR); endocrine disruptors (ED), or other properties of equivalent concern, not just those that have been regulated or restricted in other regions.

² This means solutions are focused on elimination of use at source, not on end-of-pipe or risk management. This requires either substitution with non-hazardous chemicals or where necessary finding non-chemical alternative solutions, such as re-evaluating product design or the functional need for chemicals.

³ This means taking preventive action before waiting for conclusive scientific proof regarding cause and effect between the substance (or activity) and the damage. It is based on the assumption that some hazardous substances cannot be rendered harmless by the receiving environment (i.e. there are no 'environmentally acceptable'/'safe' use or discharge levels) and that prevention of potentially serious or irreversible damage is required, even in the absence of full scientific certainty.

Overview

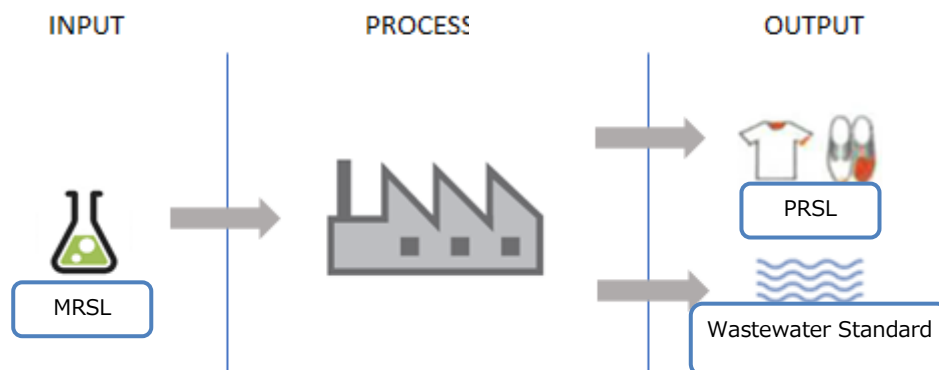
Our Approach

Proper management of chemicals in the supply chain—meaning banned chemicals are avoided and the chemicals used are tracked, stored properly, and used safely—is important to protect the consumer, workers, and environment from harm. There are a large number of chemicals used to produce FR products ranging from the polymers used for synthetic fabrics, the natural cellulose in cotton, to the dyes and softeners that make the products appeal to customers. Avoiding harmful chemicals while continuously searching for safer alternatives is at the forefront of our chemical management.

To carry out this practically, we adopt a holistic chemical management along with “INPUT – PROCESS – OUTPUT” flow of chemicals in our supply chain and set appropriate chemical restriction standards there. The standards are the reference documents for the reduction and elimination of hazardous chemicals in the whole supply chains of FR Group. Those cover the requirements related to the product safety for the end consumer, including the chemical and ecotoxicological parameters our products should meet.

The standards currently consist of the followings, but another target such as air emission may be added in the future. We will regularly reassess them and take further steps to achieve our goals together with our partner suppliers.

- Product RSL (PRSL: Product Restricted Substances List)
- Manufacturing RSL (MRSL: Manufacturing Restricted Substances List)
- Wastewater Standard



MRSL is secured in chemical and raw material selecting and purchasing through the initiatives such as chemical inventory list management and safety check in INPUT stage, and also referenced during PROCESS through chemical management auditing and training. In OUTPUT stage, PRSL is secured through product testing and wastewater is tested and remediated according to Wastewater Standard. Specific requirements are listed in each section.

Partnership

To achieve the goal, the collective industrial action is essential. To this end, FR became a Friend of ZDHC in 2019 and a signatory brand in 2020. ZDHC is an organization founded in 2015 with a mission to enable brands, retailers and their supply chains in the textile, apparel, leather and footwear industries to implement chemical management best practices and advance towards zero discharge of hazardous chemicals through collaborative engagement,

standard setting, implementation and innovation. [ZDHC Roadmap to Zero program](#) is integrated in our chemical management system as industry-wide agreed minimum baseline and common platform.

FR is also a member of [Cascadia](#) (formerly known as Sustainable Apparel Coalition (SAC)), an organization founded in 2009 to develop a universal approach to measuring sustainability performance. The Cascadia has collaborated with a diverse group of retailers, brands, manufacturers, industry associations, service providers, academic, nonprofit and government stakeholders around the world to develop a suite of tools known as the Higg Index. Higg Index is designed to provide standardized measurement for social and environmental performance and we use it to check the chemical management performance. Higg Index is now managed by [Worldly](#) (formerly known as Higg Co)

Standards

Product RSL (PRSL)

The substances listed within the [Product Restricted Substances List \(PRSL\)](#) are chemical substances that have been banned or restricted due to government legislation or are being phased out voluntarily by FR because the chemicals or materials could present an environmental, health, or safety risk. It defines the limit values restricted in the final product according to their hazard class and their possible intended use, as well as the suitable testing methods and the reporting limit. The PRSL is reviewed at least annually.

Testing programs for PRSL compliance verification are provided by each brand under FR Group. Depending on the risk associated with each brand's product type, market, etc., there might be parameters that set different limit values from FR PRSL. For more details, please refer to the specification provided by FR brands' production departments. For brands not listed below, please contact each brand.

UNIQLO: UNIQLO CHEMICAL MANAGEMENT STANDARDS

GU: GU CHEMICAL MANAGEMENT STANDARDS

PLST: PLST CHEMICAL MANAGEMENT STANDARDS

LINK THEORY JAPAN: LINK THEORY JAPAN CHEMICAL MANAGEMENT STANDARDS

THEORY/HELMUT LANG NEW YORK: CHEMICAL MANAGEMENT AND RESTRICTED SUBSTANCE COMPLIANCE AND TESTING REQUIREMENTS

Comptoir des Cotonniers/Princesse tam.tam: CDC & PTT CHEMICAL MANAGEMENT STANDARDS

Manufacturing RSL (MRSL)

Whereas the PRSL focuses on the chemical properties of the final product, the [Manufacturing Restricted Substances List \(MRSL\)](#) focuses on the high-priority substances to be phased out from FR Group's supply chains. It covers ZDHC MRSL and some other regulations through the proper screening methodology and the consultation with third party experts. The MRSL is reviewed at least annually.

Wastewater Testing Standard

Due to the intensive usage of water and the high levels of water pollution it causes, chemicals used in different production steps within the textile value chain, such as wet finishing processes, can have a particularly detrimental effect on water quality and ecosystems. When contaminated wastewater enters local water bodies, it harms humans and environment.

FR Group has tested the hazardous substances in the wastewater annually since 2013. To better evaluate the hazardous substances in wastewater and align with the industry standard, FR Group has adopted the [ZDHC Wastewater Guidelines](#) for wastewater testing from the beginning of 2019.

Input Management

The management of chemicals starts with purchasing from suppliers who can show that they are producing and delivering chemical formulations of acceptable quality. A quality formulation means that it does not contain banned chemicals and it will meet suppliers performance requirements to make a product that meets brands' standard.

Since our MRSL generally includes the chemicals listed in PRSL, suppliers can efficiently meet PRSL by asking chemical suppliers to prove that their chemical meets MRSL

FR's Minimum Requirements for Suppliers

- Suppliers shall commit to comply with FR MRSL, it is suppliers' responsibility to ensure the compliance in the facility and inform all their upstream suppliers and subcontractors about MRSL requirements.
- Suppliers shall have a documented purchasing policy with goals to meet MRSL conformant procurement.
- Suppliers shall ensure that Safety Data Sheet (SDS) files are available for all chemicals used in their facilities.
- Suppliers shall maintain Chemical Inventory List (CIL) for all chemicals used in their facilities.
- Suppliers shall register themselves to ZDHC Gateway Chemical Module.
- Suppliers shall generate ZDHC performance InCheck report on monthly basis

Commitment against MRSL

Suppliers shall sign the Declaration Letter for Compliance to commit that all the chemicals/raw materials used in the facilities comply with FR's MRSL, as well as to eliminate and reduce the hazardous substances required by MRSL.

External Communication

Suppliers shall pass on requirements to and be responsible for the compliance of the chemical suppliers, as well as the next tier of suppliers, subcontractors, additional production facilities, etc. Especially, suppliers should ask their chemical suppliers for the following information as indicators that can be used to show that a chemical formulation is MRSL-compliant.

Procurement Policy

Suppliers shall have a documented purchasing policy for chemicals. This policy contains a listing of approved vendors, and lists all chemicals which are allowed on site, as well as a review process for purchase of chemicals that are not otherwise specified in the purchasing policy. Inevitably this policy results in compliance with FR MRSL as well as FR PRSL.

Safety Data Sheet (SDS)

Suppliers shall always ask chemical suppliers for the most updated SDS for each chemical product. Suppliers should review the SDS for chemicals listed in the MRSL. (Note: chemical substances listed on the MRSL may still be present at levels below those reported on the

SDS, so this does not completely assure MRSL compliance.)

Third Party Testing or Third Party Certification on chemical products

A test report and/or certificate from a third-party testing laboratory, [Chem-Check report](#) from Chemical Formulators or recognized certifying body can be recognized as evidence that the chemical formulation complies with the MRSL, which shows higher level conformance than SDS or self-declaration.

ZDHC Gateway

[ZDHC Gateway](#) is a tool that contains a section for chemicals assessed and certified. Chemical suppliers can register their chemicals in this Gateway including information on ZDHC MRSL compliance. Depending on the comprehensiveness of the information provided, different compliance levels are assigned to the chemical formulations. These range from the lowest conformance level 1 (Document review of SDS for information relevant to ZDHC MRSL and testing of the formulation which includes screening and analytical testing or only analytical testing), Level 2 (On-site assessment of management systems plus evidence that Level 1 principles of analytical evaluation for ZDHC MRSL conformance are fulfilled) to the highest conformance level 3 (Chemical hazard assessment capability plus evidence that Level 1 and Level 2 principles for ZDHC MRSL conformance are fulfilled). The higher the compliance level, the less risk is taken that chemical formulations are not compliant to the ZDHC MRSL. Upon request, FR invites those facilities to be users of the system for free.

Chemical Inventory List (CIL)

Suppliers shall maintain a CIL and upon request share this inventory with FR. It will facilitate ensuring traceability in terms of identifying risks and manufacturing processes where hazardous chemicals might possibly be used. Suppliers can utilize [the CIL template](#) provided by ZDHC.

Performance InCheck Report

[ZDHC Performance InCheck](#) is an easy-to-read performance report that demonstrates the ZDHC MRSL conformance of a facility's chemical inventory. After having concluded a pilot project with limited scope suppliers, Fast Retailing has started to implement the Performance InCheck report as a mandatory requirement for all wet processing suppliers, with the exception of subcontractors and accessories factories. This initiative aims to ensure that the use of certified chemicals sourced from registered entities. Suppliers are directed to generate InCheck report monthly. Suppliers are free to choose ZDHC approved third party platform to generate performance InCheck report. It is expected to further scale up this project in future with larger participant group in supply chain.

Verified InCheck Level-1

The Verified InCheck – Level 1 is an on-site review to establish credibility and trust in the chemical inventory that was used by the supplier to generate their Performance InCheck Reports. The verification is done by a ZDHC approved third-party or second-party (brand representative) verifier. The due diligence protocol comprises “spot checks” of specific parameters and is not a line-by-line verification of the chemical inventory. After a successful verification, a supplier gets a checkmark in their ZDHC Gateway account, which demonstrates their verification to ZDHC Brands. Fast Retailing has initiated InCheck verification with limited suppliers. It is expected to further scale up in future with larger participant group in supply chain

Process Management

To reduce risk in the supply chain, suppliers should implement a robust chemical management system in their production facilities. Improper storage, use and disposal of chemicals leads to contamination and pollution, affecting not only MRSL compliance but also securing the worker safety. We expect suppliers to learn chemical management and have the capability to initiate and self-assess safe handling of chemicals.

FR's Minimum Requirements for Suppliers

- Suppliers shall conduct an environment impact assessment of our operations, if required by a local law.
- Suppliers shall conduct all operations in full compliance with all applicable laws and regulations regarding chemical use, storage and disposal, including maintaining valid permits. Safety procedures for chemical use, storage and disposal of chemicals, hazard signage and safe handling equipment, appropriate and operable protective equipment are provided as outlined in the SDS.
- Suppliers shall conduct all operations in full compliance with all applicable laws, regulations on wastewater and sludge, including maintaining valid permits. Facilities with internal wet processing shall measure water withdrawals and wastewater discharge and adhere to at least legal requirements as well as the foundational level of ZDHC wastewater guidelines.
- Suppliers shall conduct all operations in full compliance with all applicable laws and regulations on air emission, including maintaining valid permits.
- Suppliers shall segregate all waste streams into non-hazardous and hazardous waste, store and track them separately. If hazardous waste is treated/disposed off-site, only licensed service providers shall be contracted. If hazardous/non-hazardous waste is treated on-site, processes and documentation as per permission from authorities shall be ensured
- Suppliers shall train all employees who use chemicals on chemical hazards, risk, proper handling, and what to do in case of emergency or spill. Suppliers shall have a chemical spill and emergency response plan that is practiced periodically.
- Suppliers shall implement Supplier to Zero (StZ) program and achieve at least Level-1 certificate and renew annually.

ZDHC Chemical Management System (CMS)

ZDHC provides brands with comprehensive information on a chemical management system. [ZDHC CMS Framework](#) gives a high-level overview of the CMS requirements. [ZDHC CMS Technical Industry Guide](#) provides the guides for the implementation.

ZDHC Supplier to Zero Platform

ZDHC provides a [platform](#) to support the implementation of chemical management systems. By conducting an assessment on the platform, suppliers can benchmark the ZDHC chemical management systems and industry best practices. Suppliers can also follow the advice and guides and work step by step towards improvement. It is divided into Level-1, Level-2, Level-3, and suppliers can obtain certification for each level. Supplier to Zero provides an entry gate to the ZDHC Chemical Management framework with hands-on industry standards and best-practice guidance sheets. The recommendations provide a structured implementation plan for improvements with indicators for the required investment or effort and the expected payback time. Suppliers with Wet processing must register to this platform and obtain at least Level-1 certificate. Ultimately, suppliers will be required to achieve the highest level of certificate (Level-2)

ZDHC Academy

ZDHC provides training platform to create awareness, build knowledge and enable skills on sustainable chemical management. [ZDHC Academy](#) is a global, go-to training platform for sustainable chemical management and ZDHC tools for the relevant industries.

The Facility Environmental Module (Higg FEM)

FR request suppliers to complete the [Higg FEM](#) and share these results with our sustainability team. The reporting period is one calendar year for each supplier, and every year suppliers need to evaluate their environment performance for previous calendar year via Higg FEM.

This Module informs brands, retailers, and manufacturers about the environmental performance of their individual facilities, so they can make improvements to reduce the impacts Higg FEM creates opportunities for open conversation among supply chain partners so business at every tier in the value chain would collectively perform better. Manufacturers at any tier of the apparel, footwear, and textile industry supply chain can use this module.

Output Management (Product)

PRSL compliance protects consumers and provides compliance with legal requirements. While FR has been shifting its focus to non-hazardous input and production requirements, which means MRSL compliance, PRSL remains as a tool to verify product compliance and consumer safety.

FR's Minimum Requirements for Suppliers

- Suppliers shall commit to comply with FR PRSL. It is supplier's responsibility to ensure all produced products comply with the PRSL requirements and inform all their upstream suppliers and subcontractors about the PRSL content.
- Suppliers shall conduct sufficient testing to secure that final products comply with FR PRSL according to each brand's specific requirements.

Commitment against PRSL

Suppliers shall sign the Declaration Letter for Compliance to commit that all the produced products comply with the FR PRSL.

External Communication

Suppliers shall pass on requirements to and be responsible for the compliance of the next tier of suppliers, subcontractors, additional production facilities, etc. Changes in materials, components or production processes that affect PRSL compliance should in principle not be made, but in the event of a change, any FR brand shall be notified promptly in advance.

Third Party Testing or Third Party Certification

As PRSL compliance verification is a risk-based approach, requirements depend on product type of each brand and social/legal demands in each market. Therefore, global certification by a third party might provide good credit towards product safety as a good reference, and it would save cost and efforts on product testing. Test matrix, exemption rules or other details are provided by each brand.

Remediation

In case a failure is detected for any substance on the PRSL on any material or component of a product, the detection must be immediately reported to FR production team's person in charge and appropriate remedial action shall be conducted. Proper investigation through a root cause analysis must be carried out to determine the source of failure.

If root-cause analysis and remedial actions show that a material will not pass a re-test, the manufacturer shall seek a substitute material or source from a different material supplier.

Output Management (Wastewater)

The first step towards the prevention of wastewater contamination is for facilities to avoid the use of restricted chemical substances by using chemical formulations that conform to the FR MRSL. Facilities should then ensure wastewater is treated prior to discharge in a way that either removes the chemical physically or by chemical reaction or biological degradation. In order to monitor and control the wastewater's impact on the environment, facilities should conduct testing to evaluate the wastewater quality periodically. Starting from 2019, FR has adopted the ZDHC Wastewater Guidelines as wastewater testing standard.

FR's Minimum Requirements for Suppliers

- Suppliers with wet-process shall conduct wastewater testing twice per year according to FR's wastewater testing standard.
- Suppliers meet the below limits according to the ZDHC Wastewater Guideline V2.2
 - MRSL parameters: meet reporting criteria
 - Heavy Metals Parameters: ample and test according to discharge type (direct/indirect) comply with local legal discharge permit requirements and meeting Foundational requirements
 - Conventional parameters: Suppliers with direct discharge comply with local government discharge permit requirements and meet Foundational requirements
 - ✧ Parameters for sludge: Sample and test according to the sludge disposal pathway and meet the prescribed standard values.
- All the wastewater testing reports shall be uploaded to ZDHC Gateway
- Suppliers with MRSL detection or non-conformance parameters should develop a root cause analysis (RCA) and corrective action plan (CAP) and submit to FR within 30 days after receiving testing report.

Third Party Testing

Suppliers with wet-process⁴ shall conduct wastewater testing twice per year at the expense of suppliers discharging wastewater according to the following procedure. The target facilities are notified separately of the wastewater testing.

Wastewater testing procedure

1. FR or agent inform facility of the wastewater testing.
2. Facility sends testing application form to the third-party testing lab.
3. Facility negotiates with the third-party testing lab to determine the sampling date.
4. The third-party testing lab visits facility to complete the sampling by standard operation.
5. The third-party testing lab issues the wastewater testing reports and sends to facility.
6. Facility reviews the test report, and if no problem is found, facility uploads its final report onto the public platform and informs FR.

As we fully adopt the ZDHC Wastewater Standard, the testing reports requested by other

⁴ Manufacturing processes that use water as a carrier that contacts the product being manufactured. For example, dyeing, finishing, printing, washing, and laundry processes. Non-contact, closed-loop boiler or cooling water are not considered wet processing.

brands or conducted by the facility itself are accepted if they are tested fully according to the ZDHC Wastewater Guidelines.

Sampling and Testing

ZDHC Wastewater Guidelines updated version removed sampling and testing of incoming water from the Guidelines requirements. Once there is non-conformance to test results of the ZDHC MRSL parameters, suppliers are required to conduct sampling again for incoming water testing.

However, FR strongly recommends conducting sampling of incoming water at the same timing as that of wastewater, because separate sampling is costly and not representing the corresponding situation of sampled wastewater. We recognize incoming water testing is very important and might be the first priority action for root cause analysis.

The below chart is an excerpt from the ZDHC Wastewater Guidelines and shows required sampling and testing options depending on situations of facilities. See the ZDHC Wastewater Guidelines for more details.

Test parameters and sample locations/discharge types	ZDHC MRSL ⁷	ZDHC Heavy Metals	ZDHC Conventional and Anions	ZDHC Sludge
	Sample untreated wastewater and test Tables 1A-1T parameters	Sample effluent and test Table 2 parameters	Sample effluent and test Table 3 parameters	Sample sludge and test Table 4 parameters
Direct	Sample and test	Sample treated effluent and test	Sample and test	Sample and test against the chosen ZDHC sludge disposal pathway in accordance with the ZDHC Sludge Guideline
Indirect with pretreatment	Sample and test	Sample pre-treated effluent and only test ⁸ the following: Arsenic, Cadmium, Chromium (VI), Lead, Mercury	No sample or testing required	Sample and test against the chosen ZDHC sludge disposal pathway in accordance with the ZDHC Sludge Guideline
Indirect without pretreatment	Sample and test ⁹	Sample and only test ¹⁰ the following: Arsenic, Cadmium, Chromium (VI), Lead, Mercury	No sample or testing required	Not applicable, no sample or testing required
ZLD	Sample and test	No sample or testing required	No sample or testing required	Sample and test against the chosen ZDHC sludge disposal pathway in accordance with the ZDHC Sludge Guideline

Remediation

If MRSL parameters are detected or conventional parameters exceed the legal limits, the facility is required to perform root cause analysis and develop action plan with a defined completion date for resolution according to the template developed by FR or [ZDHC's full version template](#). FR's template will be provided to factory separately. Wherever necessary, the suppliers should re-sample wastewater to validate the resolution and upload data on the disclosure platform.

Fast Retailing has initiated a root cause analysis (RCA) with third-party involvement regarding any detected issues related to MRSL parameters. Our objective is to enhance our remediation measures and ensure that all factories identified as failing MRSL criteria are thoroughly covered under this analysis. We believe that addressing the root causes of these failures is crucial, and we will be implementing necessary measures to improve outcomes moving forward.

Disclosure

To achieve our goal, transparency about the hazardous chemicals used in FR's global supply chains is important and necessary. To know where and what chemicals are discharged is the basis for considering and taking effective action and improving chemical management.

In other words, specific information of all suppliers with wet process and the test result against hazardous chemicals must be provided. Especially, in line with the 'Right to know' principle, wastewater data must be disclosed publicly.

For transparency, FR requires facilities to upload the test results to the website of ZDHC Gateway as a must, because ZDHC Gateway is a platform connecting to global fashion industry to enable sustainable chemical management and widely used by brands, suppliers and chemical formulators at this time. The testing reports requested by other brands or conducted by the facility itself are accepted if they are tested fully according to the ZDHC Wastewater Guidelines.

Contact Information

For any questions or additional information, contact Production Team of each brand or Sustainability Team at Fast Retailing.