



# SUPPLIER HANDBOOK CHEMICAL MANAGEMENT



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# 1] Introduction

## WHAT IS DETOX?

The **Greenpeace Detox** campaign challenges top brands to make amends by working with their suppliers to eliminate all hazardous chemicals across their entire supply chain. Tchibo has publicly committed itself to eliminate a priority list of hazardous chemicals from textile supply chains until 2020 and to gain transparency over the use and discharge of chemicals. The goal is to protect water resources and improve environmental and human health both at work and in surrounding communities.

According to the World Bank,  
**20% of industrial water pollution comes from textile dyeing/ treatment.**

This massive water pollution has been the origin of the Greenpeace Detox Campaign. In order to drive change, **Greenpeace** appeals to the responsibility of international brands and **demand a commitment to eliminate hazardous chemicals!**



View / Download: [Tchibo Detox Commitment 2014](#)



View / Download: [Tchibo Detox Progress Report 2017](#)

### This handbook will support to improve your chemical management system - Put Detox into practice!



- ✓ Think out of the box and be open for new ideas and new ways to manage new challenges



- ✓ Consider that your efforts help to save the health of workers and consumers and to protect the environment



- ✓ Recognize that compliance with MRSL is essential for established and extended business relationships



- ✓ Read this handbook carefully and follow the indicated recommendations



- ✓ Use the included links for further or more detailed information and screen additional guidelines, best practices etc.



- ✓ Get in contact with Tchibo in case of any unsolved issues or in case of needed assistance

**Please share this handbook with all your business partners, especially with all the ones conducting wet processes!**

These **11 priority chemical groups** are used extensively in the textile industry and in the focus of the Greenpeace Detox Campaign. Once released, many of them accumulate in the environment, which means they are defined as persistent. Some substances are bioaccumulative, meaning they can accumulate in the blood, organs and tissues of living organisms and damage health. Also most of them are toxic and harm living organisms. That is why these chemicals should be avoided.

	Substance Group	Occurrence in product/ process
1	<b>Alkylphenoethoxylates (AP and APEO)</b>	Pigment printing, washing and scouring (e.g. pre-treatment, Anti backstaining of denim, greasy wool), Coatings, Silk treatment (de-gumming)
2	<b>Per- and polyfluorinated chemicals (PFCs)</b>	Water- and/or dirt- and/or grease-repellant finished products
3	<b>Phthalates</b>	Flexible plastic components (e.g., PVC), Print pastes, Adhesives, Plastic buttons, Plastic sleeveings, Polymeric coatings
4	<b>Brominated and chlorinated flame retardants</b>	Flame retardant finishing
5	<b>Cleavable aryl amines from Azo dyes</b>	Dyeing and printing of all other fibres, PU-materials
6	<b>Organotin compounds</b>	Odour blocking/ anti-bacterial finishing, textile printing, finishing and coating, plastics/rubber, metallic glitter, polyurethane products and heat transfer material (transfer prints label)
7	<b>Chlorobenzenes</b>	Polyester or wool/polyester fibres (dyeing), rubber carpet back, shoe polish, glue, lacquer
8	<b>Chlorinated solvents</b>	Spot cleaning agent in manufacturing, solvent, degreasing or cleaning operations (leather/ textile/ fur/ rubber/ plastic, printing, Finishing)
9	<b>Chlorophenols</b>	Preservatives or pesticides for growing cotton and when storing/transporting fabrics (anti-mold/ insect). Preservative in print pastes.
10	<b>Short chain Chloroparaffines (SCCP)</b>	Plastiziser in plastics, fat liquoring of leather and fur, flame retardants
11	<b>Heavy metals</b>	Leather tanning, wool/silk/ PA dyeing, Textile prints, colours and paints (e.g. surface paints on zippers and buttons), synthetic materials

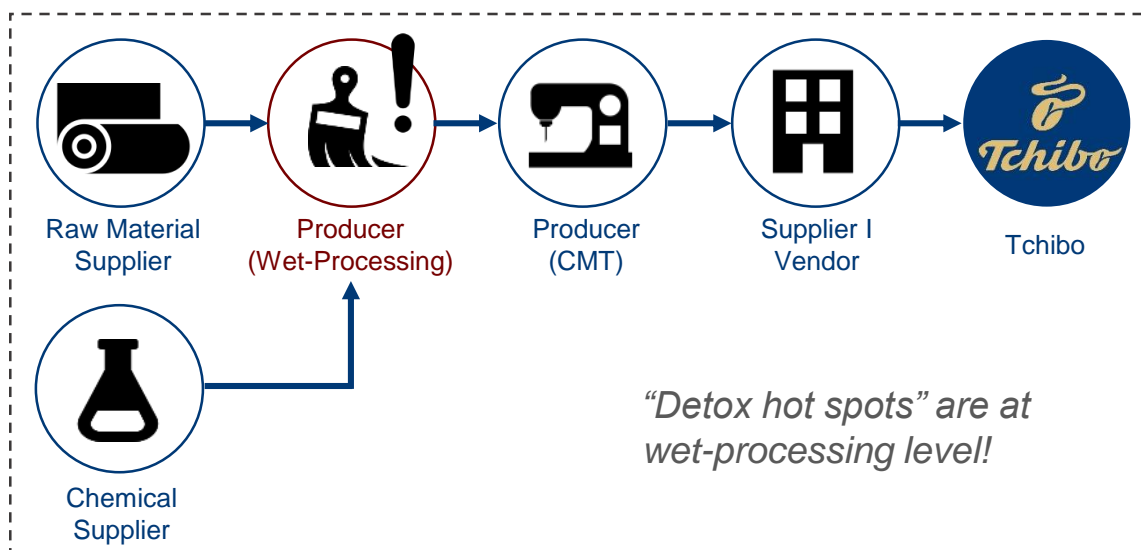
## 2] Tchibo Requirements



## Transparency I Supply Chain Disclosure

### WHY DO WE NEED TRANSPARENCY?

The Detox commitment includes transparency on the use and discharge of all hazardous chemicals with textile production. The chemical-intensive process steps usually take place in the deeper supply chain at wet-processing level. That is why full transparency of all suppliers and production processes is the basis to take action and improve chemical management.



### TCHIBO REQUIRES.....

1. **Information on all wet-processing suppliers** that are involved in the production of Tchibo products including name, address, contact information and process steps
2. A valid **waste water test** for each wet-processing supplier (see page 18 for further details)
3. The URL to the current **waste water test results published on the IPE Platform** (see page 19 for further details)

.....FOR EVERY PRODUCT!



## RSL | MRSL Compliance

For the implementation of the Detox requirements throughout the supply chains, Tchibo has updated and refined its product and production standards:



The **Restricted Substances List (RSL)** defines thresholds and bans for hazardous substances in **components, semi-finished and finished products**.



The **Manufacturing Restricted Substances List (MRSL)** defines thresholds and restrictions for substances identified as hazardous and potentially used **in production and discharged** into the environment during processing.

Hazardous substances endanger the health of workers and consumers and have harmful environmental effects.

- ➔ Both lists provide an overview of substances that must not be used or detected or which must be within the defined limits.
- ➔ In case a Restricted Substance has been detected, it has to be replaced in production or need to be strictly controlled in chemical preparations, processes and on the final product.
- ➔ Every actor who is involved in the production of products for Tchibo needs to be informed about the RSL/MRSL and is responsible to safeguard compliance with the requirements of RSL/MRSL.

### INDUSTRIE STANDARDS

Tchibo is not the only company following the Detox approach. In the past years various brands globally have committed for a cleaner textile production with less impact for workers and the environment.



View / Download: [AFIRM RSL](#)



View / Download: [ZDHC MRSL](#)

**Tchibo suppliers following our requirements are well prepared to satisfy market requirements!**





# RSL I MRSL Compliance

## HOW TO READ THE TCHIBO MRSL?

Current  
Version  
= 3.0

TCHIBO Manufacturing Restricted Substances List (MRSL V3.0) - Implementation Guidance						
Substance group	Substance name	CAS No.	Method: Input: Chemical Formulation	Method: Output: Waste Water	Method: Output: Sludge	Status: banned, phase out, verification of hazardous characteristics / applicability ****
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEO): including all isomers (No intentional use)						
Nonylphenol (NP) mixed isomers	Nonylphenol	various	500 ppm (LC/MS), (GC/MS)	With reference to DIN EN ISO 18857 and followed by Liquid Chromatography – Mass Spectrometry (LC-MS) Analysis NPED(1+2); GC/MS	Solvent extraction DIN EN ISO 18857 LC/MS mod, resp. NPED(1+2); GC/MS	banned
	104-40-5	11066-49-2				banned
	4-Nonylphenol (branched)	25154-52-3				banned
		84852-15-3				banned
		1173019-62-9				banned
Octylphenol (OP), mixed isomers	Nonylphenol (mixed isomers)	90481-04-2	250 ppm (LC/MS), (GC/MS)	With reference to DIN EN ISO 18857 and followed by Liquid Chromatography – Mass Spectrometry (LC-MS) Analysis NPED(1+2); GC/MS	Solvent extraction DIN EN ISO 18857 LC/MS mod, resp. NPED(1+2); GC/MS	banned
	various					banned
	4-(1,1,3,3-Tetramethylbutyl)phenol	140-66-9				banned
	Octylphenol	27193-28-8				banned
	4-Octylphenol	1806-26-4				banned

Substance that go beyond the ZDHC MRSL are highlighted in grey. These are additional substances that are either regulated by law or by the Tchibo requirements. Updated information will be provided, if new substances are added to the list to start elimination.

Concentration limits for contaminations/ unwanted impurities in chemical inputs have been harmonized with values in ZDHC MRSL/ German Partnership for sustainable textiles MRSL.

The status of elimination defines the date after which the priority substances must not be used in production of Tchibo articles any more.

Methods for waste water and sludge analysis are listed without detection limits, as further knowledge has to be gained by Tchibo, before detection limits and tolerance values for contaminations in waste water and sludge can be defined. In case residues of priority substances have been detected in discharges or products, a root cause analysis must be initiated to find the source of the contamination. Based on the results measures shall be defined to eliminate the priority substances from the production.



View / Download: [Tchibo MRSL Implementation Guidance](#)



## RSL I MRSL Compliance

### HOW TO ENSURE MRSL COMPLIANCE?

#### INTERNAL COMMUNICATION FLOW

- ✓ **Inform all involved departments** of your company (e.g. procurement, quality assurance, colour lab, production etc.) **about the RSL/MRSL requirements**
- ✓ **Establish a communication flow** which ensures that all departments/responsible persons are **informed and updated about RSL/MRSL requirements**

#### EXTERNAL COMMUNICATION FLOW

- ✓ **Communicate the Tchibo RSL/MRSL** to material and chemical suppliers as well as commission units and ask for recognition and confirmation of adherence
- ✓ **Develop communication procedures with Tchibo** regarding Detox cases such as: Restricted Substance(s) have been identified, product specifications cannot be realized, limits cannot be achieved.

#### CHEMICAL SOURCING ACCORDING TO MRSL

- ✓ **Only use and purchase chemicals that are compliant with MRSL requirements. Evaluate data** from SDS to ensure Tchibo MRSL compliance.

- ✓ Ask your chemical suppliers for **supporting secondary documents to proof conformity** with the Tchibo MRSL and to proof qualification of the chemical product to meet the Tchibo RSL/MRSL requirements. These documents comprise

- ✓ test reports
- ✓ certificates or
- ✓ at least declarations (stating the chemical main component, CAS number, presence and quantity of substances mentioned in the Tchibo RSL/MRSL for each chemical preparation, which is indicated with full trade name) →

#### Letter of Confirmation

This is to confirm that the following chemical product:

NAME OF THE CHEMICAL

qualifies for the dyeing, printing and finishing of textiles in compliance with the Tchibo MRSL V3.0 provided that it is properly applied according to the technical recommendations.

Company name  
Signature

- ✓ **Implement testing procedures** to close data lacks and **Avoid the usage of chemical preparations with insufficient data**



## Documentation (Inventory I SDS)

Maintaining an inventory of the chemicals used and stored in factories is necessary in order to keep track. There are two kinds of inventories:



### Material Inventory List




is a list of all materials and semi-finished components used and stored on-site with relevant information concerning their risks and components.



### Chemical Inventory List

is a list of all chemicals and chemical mixtures used and stored on-site with relevant information concerning their risks and components

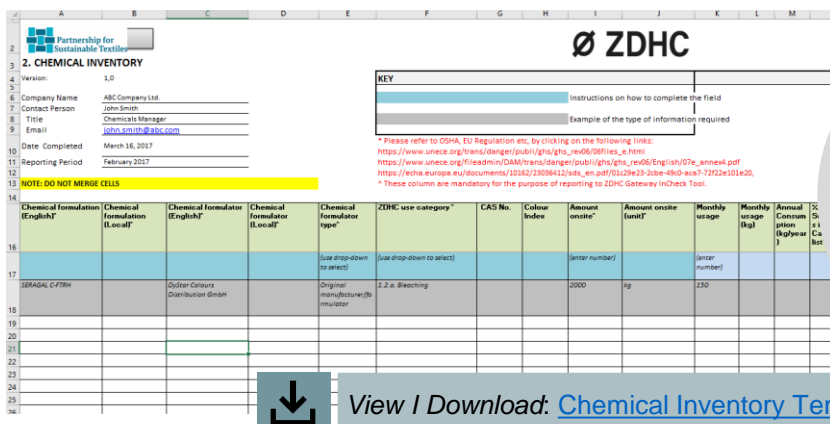
A **chemical inventory** is the core element of a functional chemical management system, which can help you to identify and organize all chemical related issues in your production, from the calculation of chemical consumption to the verification of client's and legal requirements for restricted hazardous substances on final products. **WHAT TO DO?**

	<p><b>STEP 1: Set up an inventory of the chemicals used and stored in the factory.</b> The inventory list shall at least contain the following information:</p> <ul style="list-style-type: none"> <li>▪ Trade name of chemical product</li> <li>▪ Supplier name</li> <li>▪ Manufacturer name</li> <li>▪ Classification: Substance or mixture</li> <li>▪ Chemical composition (main ingredient)</li> <li>▪ CAS number</li> <li>▪ C.I. No for colourants</li> <li>▪ SDS availability</li> <li>▪ Norm of SDS</li> <li>▪ GHS classification</li> <li>▪ Field of application in production</li> <li>▪ Annual consumption</li> <li>▪ Physical form of the chemical product</li> <li>▪ Available toxicological data</li> </ul> <p>To complete an inventory list you have to <b>collect documents</b> from the chemical producer such as Safety Data Sheets (SDS), producer declarations, test reports etc.</p>	<input checked="" type="checkbox"/>
	<p><b>STEP 2: Update the inventory continuously</b></p> <ul style="list-style-type: none"> <li>✓ Add new chemicals</li> <li>✓ Remove expired and obsolete chemicals from the inventory and dispose of them appropriately</li> </ul>	<input checked="" type="checkbox"/>
	<p><b>STEP 3: Ensure access and archiving</b></p> <ul style="list-style-type: none"> <li>✓ Archive the inventory and data sheets for at least 24 months</li> <li>✓ Make the inventory and the corresponding data sheets available to anyone who enters this work area</li> </ul>	<input checked="" type="checkbox"/>



## Documentation (Inventory I SDS)

Tchibo supports the use of the chemical **inventory template** provided by ZDHC and other members of the Partnership for Sustainable Textiles:



**Ø ZDHC**

**2. CHEMICAL INVENTORY**

Version: 1.0

Company Name: ABC Company Ltd

Contact Person: John Smith

Title: Chemicals Manager

Email: john.smith@abc.com

Date Completed: March 16, 2017

Reporting Period: February 2017

**NOTE: DO NOT MERGE CELLS**

**KEY**

Instructions on how to complete the field

Example of the type of information required

\* Please refer to CSH, EU Regulation etc. by clicking on the following links:  
[https://www.unec.org/trans/danger/publi/ghs/ghs\\_rev06/06files\\_e.html](https://www.unec.org/trans/danger/publi/ghs/ghs_rev06/06files_e.html)  
[https://www.unec.org/Trans/DAM/trans/danger/publi/ghs/ghs\\_rev06/06files\\_e.html](https://www.unec.org/Trans/DAM/trans/danger/publi/ghs/ghs_rev06/06files_e.html)  
[https://echa.europa.eu/documents/10162/2006433/ghs\\_en.pdf?d12e2b32e32e4b0a71202e203e20](https://echa.europa.eu/documents/10162/2006433/ghs_en.pdf?d12e2b32e32e4b0a71202e203e20)

\* These columns are mandatory for the purpose of reporting to ZDHC Gateway (nCheck Tool)

Chemical formulation (English)^	Chemical formulation (Local)^	Chemical formulator (English)^	Chemical formulator (Local)^	Chemical formulator type^	ZDHC use category^	CAS No.	Colour Index	Amount onsite^	Amount onsite (unit)^	Monthly usage (kg)	Monthly usage (unit)	Annual consumption (kg/year)	% mass of SVHC
SEBAGIL C-170H		Seibagil Chemicals	Distribution GmbH	Original manufacturer/ distributor	2.2.2. Bleaching			2000	kg	150			

**View / Download: [Chemical Inventory Template](#)**

If you have already **inventory lists** in place, **check them on completeness** by comparison with the inventory list template and integrate additional columns which are missing on your list!

### -----GUIDANCE FOR INVENTORY COMPLETION AND EVALUATION -----

Chemical formulation (English)^	Chemical formulation (Local)^	Chemical formulator (English)^	Chemical formulator (Local)^	Chemical formulator type^
Commercial name of the single chemical product/ mixture under which it is sold to your company		Indicate the name of the producer/ manufacturer of the chemical product. List name and contact details		Chose whether the formulator is the original manufacturer, agent, distributor, etc.

ZDHC use category ^	CAS No.	Colour Index	Amount onsite^	Amount onsite (unit)^
Indicate for which function the chemical/ mixture is used in your process e.g. printing, bleaching, softener, etc.	CAS and CI. No. allow a clear identification of the chemical substances. <b>! You can find the information in the safety data sheet (SDS) chapter 3 !</b>		List the amount stored onsite and the related measurement unit	

Monthly usage	Monthly usage (kg/month)	Annual consumption (kg/year)	% mass of Substances in SVHC list?	Do you have an MSDS/ SDS?
List the monthly consumption in kg (on average)		List the annual consumption in kg (on average)	SVHC = Substance of very High Concern according to REACH	Indicate if safety data sheet is available by "yes" or "no"



## Documentation (Inventory I SDS)

Compliant with latest version of ZDHC MRSL??	Support document for ZDHC MRSL finding	Certifications	Expiry dates of certifications	MSDS/ SDS issue date
<i>Indicate whether the chemical is compliant with ZDHC MRSL by "yes" or "no"</i>	<i>e.g. GOTS certification</i>	<i>e.g. GOTS letter of approval, OEKO-TEX Eco Passport, Bluesign Certif.</i>	<i>mm.dd.yyyy</i>	<i>mm.dd.yyyy</i>

Hazard Statement (H)	Precautionary Statement (P)	GHS Classification <small>= Globally Harmonized System of Classification and Labeling of Chemicals</small>	Use of PPE	Biological degradation/ elimination in %
<b>H-Statement</b> describes the nature and degree of the hazard of the chemical. <b>P-Statement</b> describes recommended measures to prevent adverse effects resulting from exposure. <b>! You can find the information in the safety data sheet (SDS) chapter 3 !</b>		<b>List GHS classification according to SDS, chapter 2</b>	<i>Provide information of suitable types of PPE e.g. "Wear protection gloves"</i>	<b>Add OECD norm and results ! You can find the information in the safety data sheet (SDS) chapter 12 !</b>

COD	BOD5	Permanent halogen organic compounds in %	Acute aquatic toxicity	Heavy metal in %
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### **Environmental indicators according to SDS, chapter 12**

*COD = chemical oxygen demand | BOD = biological oxygen demand*

Storage condition requirement	Place of storage/ building/ room	Delivery amount	Delivery amount (unit)	Delivery date
<i>Outline conditions for safe storage, including any incompatibilities</i>	<i>Indicate where the chemical is stored exactly</i>	<i>List the delivery amount and the related measurement unit</i>		<i>mm.dd.yyyy</i>

Delivery invoice reference	Chemical tests performed	Dates of chemical tests	Chemical test results against MRSL requirem.	Chemical testing laboratory
<i>List the invoice number for each delivery</i>	<i>Indicate whether any chemical tests are conducted by the chemical supplier or your company</i>	<i>mm.dd.yyyy</i>  <i>Indicate the date mentioned on the test report</i>	<i>Indicate if presence arise from a failed test against Tchibo's MRSL</i>	<i>List name and contact details of the testing laboratory</i>

Details on compliance with Brand RSLs	Disposal of chemical	Comments
<i>Indicate whether the chemical is compliant with Tchibo RSL by "yes" or "no"</i>	<i>Indicate disposal information according to SDS, chapter 13</i>	<i>Add further comments/ remarks</i>



## Documentation (Inventory I SDS)

**Safety Data Sheets (SDS)** include information about the properties of the substance or mixture, its hazards and instructions for handling, disposal and transport and also first-aid, fire-fighting and exposure control measures. The format and content of the safety data sheets are specified in REACH.

A safety data sheet must be provided in local language to downstream users for:

- A substance or mixture that is classified as hazardous according to CLP (Classification, Labelling and Packaging Regulation (EC) No 1272/2008).
- A substance that is persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), or
- A substance that is included in the Candidate List of substances of very high concern (SVHCs)

**SDS contains the description of the data used to identify the hazards of a chemical/ mixture**

SDS should always be provided by chemical supplier. If an SDS is not included, contact your chemical supplier and request this document!!

**Archive all SDS for at least 24 months!**

*The original SDS provided by chemical supplier follows a 16 section format which is inter-nationally agreed:*

1. Identification of substance
2. Hazards identification
3. Composition/ ingredients
4. First Aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Personal Protective Equipment
9. Physical/ chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information



## Housekeeping I Processes

### ENSURE GOOD CHEMICAL MANAGEMENT HOUSEKEEPING

□ All **chemicals** are **stored safely** in accordance with the safety data sheet (SDS) and **good housekeeping** is ensured




Guidelines for chemical storage

For safe storage the following requirements should be fulfilled:

- ✓ Proper and clean containers to avoid contamination
- ✓ No storage of chemicals in drinking bottles!!
- ✓ A flat and impermeable floor to prevent contamination of soil e.g. epoxy floors
- ✓ Secondary containment/ no storage of chemicals directly on floor (proper protection in case of spills)
- ✓ Emergency drains (connected to the effluent treatment plant)
- ✓ No exposure to rain if containers are stored outside
- ✓ Stable shelves incl. proper protection from dropping e.g. by borders at shelves
- ✓ No storage of chemicals over head
- ✓ Written instructions, that drinking, eating and smoking is strictly forbidden in storage area
- ✓ Appropriate fire extinguishers and smoke detectors
- ✓ Clean and clear ways, marked emergency exits
- ✓ Air extraction equipment for exhaust air purification
- ✓ Eyewash stations

□ **Incompatible chemicals** are stored **separately** to avoid poisonous gas or fires

Chemicals that may react with each other should be stored remotely from each other. Safety data sheets (SDS) provide specific information on chemical compatibility!

Chemical Hazard <small>Always refer to the SDS</small>	Flammable	Acid	Base	Oxidizer	Toxic
Flammable					
Acid					
Base					
Oxidizer					
Toxic					





## Housekeeping I Processes

☐ **Personal Protective Equipment** and first aid facilities are available and in good working order. **Emergency exits** are clearly marked and free of obstacles at any time!

☐ **All chemical containers** are labelled according to GHS label requirements

**GHS = Globally Harmonized System of Classification and Labelling of Chemicals**

☐ **Cautionary and warning signs** are available and clearly visible

☐ **Abstract SDS** in local language are displayed at all relevant workplaces as well as storage areas

Dust Mask



Only for dust

Air Purifying Respirator



For chemicals

1) Name and CAS#      3) Hazard Statement  
2) Signal Words      4) Precautionary Statement

**ISOBUTYL ALCOHOL**

CAS Number: 78-83-1  
DOT Number: UN 112

**DANGER**

Highly flammable liquid and vapor. Causes serious eye damage. May cause drowsiness and dizziness.

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing fumes/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.
















**6) GHS Pictograms**



Fill Weight: 123.45 lbs.      Lot No.: 6305051700  
Gross Weight: 145.60 lbs.        
Fill Date: 10/9/2013      See SDS for further information

**IMPRINT ENTERPRISES** SINCE 1975 555 N. Commons Dr. \* Aurora, IL. 60504 \* 800.433.4512 \* www.imprint-e.com

5) Chemical Supplier Information

Shape	Meaning	Example
	Prohibition	 
	Warning	 
	Mandatory action	 
	Escape route Safe condition Escape equipment	 
	Fire fighting equipment	 





## Housekeeping I Processes

### ENSURE GOOD CHEMICAL MANAGEMENT PROCESSES

#### RESPONSIBILITIES AND COMMUNICATION

*Person(s) in your company is (are) appointed to be responsible for Detox management and Detox communication.*

- Identify and define **tasks and duties for Detox management** in your company
- Find out which **departments** have to be **involved** in your company
- Define the **required qualifications** which are essential to perform the tasks
- **Appoint responsible person(s)** who is/are responsible for Detox topics
- Provide **adequate training** for the responsible person in case of need
- **Inform** other departments/persons **about the responsibilities**
- Identify and define **interfaces** and areas of interaction between responsible person(s) and departments
- Provide **management attention and support** to the responsible persons



#### WORKER TRAINING

*Person(s) in your company is (are) regularly trained and informed on Detox/ chemical management practices*

- **Determine training demands** for different departments/persons involved in RSL/MRSL management
- **Identify the initial and individual knowledge** level of the responsible persons
- **Establish training courses and routines** based on detected training demand (e.g. awareness building measures for employees and department involved, training on Detox topics and management for the responsible person(s))
- Based on the training content and the availability of respective knowledge within your company, **conduct** internal trainings or **trainings** by external experts
- **Check continuously** if training content is understood
- In case of new or up-dated requirements or in case new employees shall be trained, **adopt training curricula** accordingly
- **Ensure that knowledge** is not person related and **available centrally in the company**





## Waste Water Testing

### WHO?

All wet-processing units that are involved in the production of Tchibo products need to provide a valid waste water test.

### WHAT?

As a minimum the 11 priority chemical groups defined by Greenpeace/ ZDHC need to be tested:

- ☐ Alkylphenols
- ☐ Perfluorinated compounds (PFCs)
- ☐ Phthalates
- ☐ Brominated/chlorinated flame retardants
- ☐ Azo dyes
- ☐ Organotin compounds
- ☐ Chlorobenzenes
- ☐ Chlorinated solvents
- ☐ Chlorophenols
- ☐ Short-chain chlorinated paraffins (SCCPs)
- ☐ Heavy metals

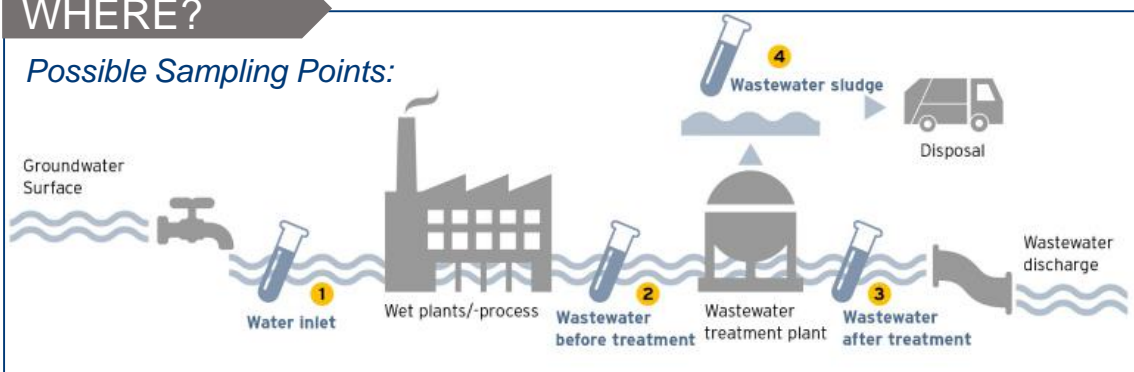
**Tchibo accepts external waste water tests** if they cover ZDHC scope/ 11 priority chemical groups and are no older than 1 year – regardless of which sample point!

**If no test report is available – Tchibo commissions a test via Intertek at supplier cost!**

Accepted Laboratories: Intertek, Bureau Veritas, SGS, UL, TÜV

### WHERE?

*Possible Sampling Points:*



### WHY?

The discharge of wastewater containing hazardous chemicals could have a significant impact on the environment and human health. The first step towards the prevention of wastewater contamination is by using only chemical formulations that are compliant with the Tchibo MRSL. Wet-processing units should then ensure proper wastewater treatment prior to discharge.



## Waste Water Testing

### FULL DISCLOSURE OF EFFLUENT DATA

Chemicals used in production of consumer goods can harm the health and therefore every global citizen has a fundamental **'Right to Know'** which hazardous chemicals are being used and discharged into the environment.

As part of Tchibo's commitment to create transparency over the use of chemicals in its supply chain, all factories involved in Tchibo production need to publish their current wastewater test results on the IPE platform. If not already done together with the testing lab please set up an account at <http://www.ipe.org.cn/en/> and upload the results of the wastewater report to the platform. Please share the link with Tchibo.

### What is the IPE Platform?

The Institute of Public and Environmental Affairs (IPE) is a non-profit organization based in Beijing, which hosts a pollution database to help companies and the public monitor corporate environmental performance. This includes a database for producers to publish wastewater test results. IPE's aim is to increase disclosure of environmental information to facilitate local community comprehension of the hazards and risks in their environment.



### USE WASTE WATER DATA TO CONDUCT A ROOT CAUSE ANALYSIS

*Use the waste water results to start finding the source of the detected chemicals and eliminating them from your production:*

- Make yourself familiar with the results of the waste water analysis
- Match the date of the test with your production: which chemicals/ mixtures and raw materials have been used? Which processes took place?
- Check the respective safety data sheets of all process chemicals, contact your chemical supplier and confront them with the results
- Consider all possible sources of contamination such as chemicals, raw materials, incoming water, cleaning agents, packaging material, etc.
- Please document your actions in a management action plan and **submit a corrective action strategy** to [detox@tchibo.de](mailto:detox@tchibo.de) within two weeks

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5								
6								

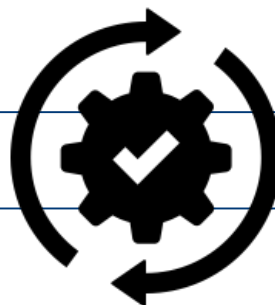
  

Template - Support to conduct a root cause analysis for chemical failures						
Consider all possible sources of contamination such as chemicals, raw materials, incoming water, packaging material, etc.						
MANAGEMENT ACTION PLAN						
#	Detected Chemical	Identified Root Cause for Detected Chemical	Management Measure/ Corrective Action	Responsible Person	Deadline	Remarks/ Status

# **3]** Get Started - Checklist Responsibilities



## Supplier | Vendor



### TRANSPARENCY

*The production units where **wet processes such as dyeing, printing, washing and finishing** are conducted shall be known and their compliance with the RSL/MRSL is ensured*

- ☐ **List all your suppliers** with name, geographical location and their type (e.g. trader or producer)
- ☐ **Identify** your suppliers with own **wet processing units**
- ☐ Ask your suppliers to determine and **disclose supply chain actors** conducting wet processing units
- ☐ **Collect, evaluate and document relevant supply chain data** from suppliers and production units
- ☐ **Evaluate supplier's feasibility** as your Detox partner
- ☐ **Build up reliable and stable relationships** with producers
- ☐ **Implement control measures** to ensure producer's compliance with RSL/MRSL requirements and **establish a supplier management and evaluation system**
- ☐ **Install an internal traceability system** to follow up which supply chain actors are involved in production of a single product.

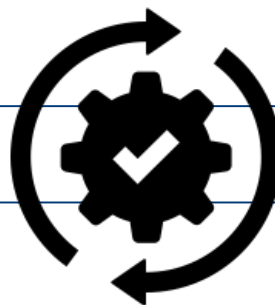
### DOCUMENTATION

*Evidences of conformity shall be documented properly*

- ☐ **Collect and document conformity declarations** from suppliers' products which are sold to Tchibo stating that the supplied goods are produced in compliance with the Tchibo RSL/MRSL. These documents include test reports, certificates or self-declarations as a minimum.
- ☐ **Document** available **test reports** for used components, materials as well as for final products
- ☐ **Keep documents for an adequate period** in accordance with legal storage and product liability obligations



Producer (CMT)



## INVENTORY

*A comprehensive inventory list of all used components as basic instrument to manage compliance with Detox, RSL and MRSL requirements, shall be established and maintained*

- ☐ **Identify all materials, components and semi-finished products** available in your production site
- ☐ **Keep and maintain an inventory list** on all identified components such as fabrics, yarns and trims in use and stored

- ☐ **Ensure** that your inventory lists are always **up-to-date**

- ☐ **Identify chemicals** (e.g. spot remover, lubricants) used in production

- ☐ Keep and maintain an **inventory list on all identified chemicals at your sub-suppliers**. The lists should be used to:
  - ✓ check compliancy of chemicals with Detox and Tchibo requirements
  - ✓ identify and eliminate gaps in documentation

## DOCUMENTATION

*Bill of materials for all Tchibo articles and evidences of conformity shall be documented properly.*

- ☐ **Record a Bill of Material (BOM)** for each article/order to be produced for Tchibo including all components used in a material inventory

- ☐ **Collect and document conformity declarations** from suppliers' products which are sold to Tchibo stating that the supplied goods are produced in compliance with the Tchibo RSL/MRSL. These documents include test reports, certificates or self-declarations as a minimum.

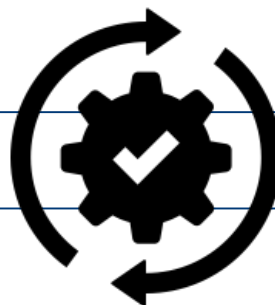
- ☐ **Document** available **test reports** for used components, materials as well as for final products

- ☐ **Documents procedures, training materials and instructions** related to Detox and Chemical Management

- ☐ **Keep documents for an adequate period** in accordance with legal storage and product liability obligations



## Producer (Wet-Processing)



### RSL I MRSL COMPLIANCE

*Chemicals and chemical preparations in use shall be evaluated and in case of non-conformity with the Tchibo RSL/MRSL requirements, procedures are defined.*

#### ☐ **Evaluate data** from SDS to ensure Tchibo MRSL compliance

Ask your chemical suppliers for **supporting secondary documents to proof conformity** with the Tchibo MRSL and to proof qualification of the chemical product to meet the Tchibo RSL/MRSL requirements. These documents comprise

- ☐ ✓ test reports
- ☐ ✓ certificates or
- ☐ ✓ at least declarations (stating the chemical main component, CAS number, presence and quantity of substances mentioned in the Tchibo RSL/MRSL for each chemical preparation, which is indicated with full trade name)

#### ☐ **Implement testing procedures** to close data lacks

#### ☐ **Select chemical suppliers** based on quality of data and documents

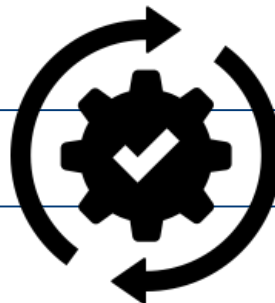
#### ☐ **Avoid the usage** of chemical preparations **with insufficient data**

##### **Assess chemicals and chemical preparations** in use and

- ☐ ➤ *In case of non-conformity (chemical preparation contains restricted substance(s) in values above the thresholds defined in Tchibo MRSL):* Substitute the chemical preparation by safe alternative or consult Tchibo for further advice.
- ☐ ➤ *In case chemical preparation contains restricted substance(s) in values below the thresholds or in case the processed material can meet the threshold values defined by the Tchibo RSL:* Control processes and process parameters properly to ensure that the values stay below the defined thresholds. Check residues on the processed material randomly by testing or consult Tchibo for further advise.
- ☐ ➤ *In case the chemical preparation contains no restricted substance(s) and no risk of unwanted reaction of a chemical with others is given:* The chemical preparation can be used.



## Producer (Wet-Processing)



### DOCUMENTATION (INVENTORY I SDS)

*Evidences of conformity shall be documented properly*

- ☐ If you have already **inventory lists** in place, **check them on completeness** by comparison with the Tchibo chemical inventory list template and integrate additional columns which are missing
- ☐ To complete an inventory list you have to **collect documents** from the chemical producer such as Safety Data Sheets (SDS), producer declarations, test reports etc.
- ☐ **Ensure** that your inventory lists are always **up-to-date**
- ☐ **Request SDS (Safety Data Sheets)** from your chemical suppliers **for all chemicals** and chemical preparations, file and update it regularly
- ☐ **Check SDS on completeness** (norm, CAS number, chemical composition, H-Phrases etc.) → **Reject SDS** which do not comply with current legal requirements
- ☐ **Record the individual recipes** (at least for Tchibo orders) stating used colourants and auxiliaries and chemicals with complete trade names, indicate the chemical preparations with exact quantity used for processing the specific order (per colour shade) plus according process parameters such as temperature, pH-value and time
- ☐ **Document** available **test reports** for incoming material, processed materials as well as for final products
- ☐ **Documents procedures, training materials and instructions** related to Detox and Chemical Management
- ☐ **Keep documents for an adequate period** in accordance with legal storage and product liability obligations

### HOUSEKEEPING I PROCESSES

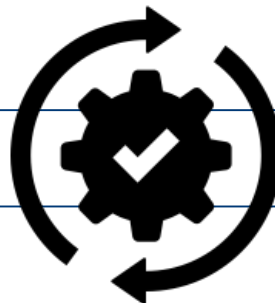
*Keeping a facility clean and organized helps to reduce risks of accidents and exposure to hazardous and ensure compliance with Detox requirements and further environmental and occupational health & safety (OHS) regulation*

- ☐ **Store chemicals safely** in separated storage areas





## Producer (Wet-Processing)



- ☐ Use proper and **clean containers** to avoid contamination
- ☐ **Avoid leakage and spillage** in production and storage areas
- ☐ **Label the containers** in storage and production with the full and correct trade name of the chemical preparation, respective warning signs as well as relevant storage and OHS provisions from the SDS
- ☐ **Install warning notices** related to restricted substances e.g. 'Contains PVC' or 'Do not use for baby items'
- ☐ **Avoid (cross-)contamination** of goods in production by appropriate measures such as regular cleaning of machinery and containers, separate processing for goods, etc.
- ☐ **Implement clearly defined cleaning routines/** machine downtime to avoid contamination by:
  - secondary auxiliaries such as glue;
  - residues on working material such as screens, tables or squeegees;
  - leavings on Personal Protective Equipment such as gloves;
  - transfer from machinery e.g. during curing
- ☐ **Ensure that workers handling chemicals are trained** and equipped with adequate personal protective equipment

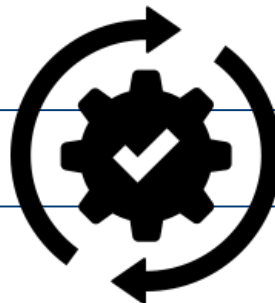
## WASTE WATER TESTING

*In the production processes and at the production site processes for the proper management of wastewater shall be implemented*

- ☐ **Ensure that wastewater is not discharged untreated.** Correct treatment has to be ensured either through a functional own effluent treatment plant or a central treatment plant
- ☐ **Measure** the discharged water regularly
- ☐ **Register on IPE** and ensure annual availability/upload on IPE of test reports concerning discharged water (test parameters should cover the 11 priority hazardous chemical groups)



## Chemical Supplier



### R&D

*Research and development are on-going processes, which have to be conducted on a steadily base*

- ☐ Constantly and continuously **observe trends** in legal regulation as well as in the textile industry or NGO driven calls for restrictions/regulations of chemical substances in order to anticipate the demand or need for substitution of certain substances and to be able to readily offer products using alternative chemical substances when restrictions or phase out scenarios definitively enter into force

- ☐ Maintain a routine procedure to **regularly review all chemical substances used in their product range against legal and market requirements** to identify restricted substances/chemicals of concern (SVHC, substances with EH&S relevance, substances identified as critical/ hazardous by NGOs, etc.)

- ☐ **Conduct chemical hazard assessments:** It is necessary that business processes are in place to gather and monitor data of chemical substances which has impact on humans or the environment

- ☐ **Gain knowledge, to control and to monitor the level of potential impurities** and traces/technically unavoidable impurities in his chemical products to ensure a safe use and product compliance for downstream users of his products

### DOCUMENTATION

*Availability of reliable data and its timely up date to changing legal regulations is a key factor to meet all human health and environmental requirements and to safeguard the conformity of products with statutory regulations and company standards like the Tchibo requirements*

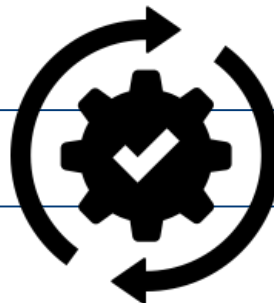
- ☐ **Provide Safety Data Sheets (SDS)** free of charge actively or upon request for any hazardous chemicals according to one of the following norms or directives (GHS, 1907/2006 EEC (REACH), ISO 11014-1, GB/T 17519-2013)

The SDS needs to ....

- ☐
  - be elaborated by a competent party
  - be provided in the local language of the customers
  - bear a date and be up dated when new information on the chemical becomes available or status of REACH authorization is changed or a relevant restriction is imposed under REACH
  - provide technical data for downstream users on product application in view of enabling the user to meet OHS provisions and restrictions/ limitations on chemical substances given in legal standards



## Chemical Supplier



### COMMUNICATION

*Communication processes with customers have to be implemented and the clear labelling of chemical products has to be ensured*

- ☐ Have a business process in place to actively **provide most recent versions of safety data sheets** to customers
- ☐ **Provide secondary technical instructions on the application of the chemical products** to customers – especially in view of meeting market requirements and standards. Upon request declarations against the Tchibo RSL/MRSL need to be made available – based on checking the feasibility of compliance
- ☐ **Ensure that chemical containers/ drums are clearly labelled** for identification and safe handling such as with complete trade names of the chemical substance/ mixture, respective warning signs/ pictograms and production batch/ lot numbers

***Suppliers and producers of chemical products are essential actors to achieve Zero Discharge. Their contribution to the Detox commitment and the given support to their customers (textile producers) are crucial factors in establishing a holistic Chemical Management System to ensure compliance with Tchibo requirements!***



## **4]** Appendix - Links | Videos | Further Reading

## CPI2

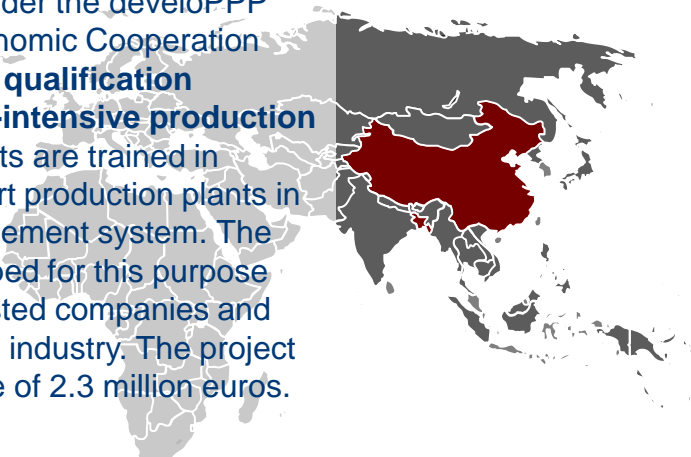
Tchibo has developed several tools to support suppliers and factories to improve their chemical management. Besides this handbook we recommend the online training CPI<sub>2</sub>, a knowledge platform which helps factories to identify improvement potentials and provides concrete guidance.



Register Online: [CPI2 \(Carbon Performance Improvement Initiative\)](#)

## Strategic alliance on sustainable chemical management in the textile production

To promote on-site advisory services, in 2016 Tchibo teamed up with the REWE Group and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) under the developPPP program by the Federal Ministry for Economic Cooperation and Development to devise and adopt a **qualification programme for chemicals- and water-intensive production areas**. As part of this project, local experts are trained in Bangladesh and China, who then support production plants in the establishment of a chemicals management system. The structures and training concepts developed for this purpose are to be made available to other interested companies and thus contribute to an improvement in the industry. The project will run for three years and has a volume of 2.3 million euros.



## Partnership for Sustainable Textiles



View / Download: [Chemical Fact Sheet Antimony](#)



View / Download: [Chemical Fact Sheet DEHP](#)



View / Download: [Chemical Fact Sheet EDTA und DPTA](#)



View / Download: [Chemical Fact Sheet Formaldehyde](#)



View / Download: [Chemical Fact Sheet PFCs](#)



View / Download: [Chemical Fact Sheet KMnO<sub>4</sub>](#)



View / Download: [Chemical Fact Sheet Quinoline](#)



View / Download: [Guideline – Chemical Management](#)

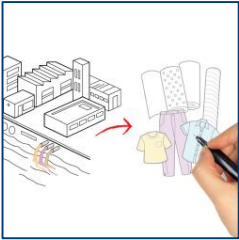









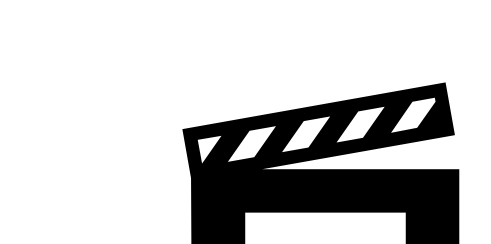


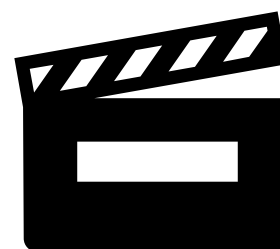
Partnership for Sustainable Textiles

Tchibo is member of the German “Partnership for Sustainable Textiles”, a multi-stakeholder initiative with about 150 member brands. The initiative is striving to improve the conditions in the global textile production – from the production of raw goods for textile production to the disposal of textiles.

## VIDEOS

Fur further information we also recommend training videos on better chemical management. The “Clothing Industry Training Authority” (CITA) based in Hong Kong has developed 10 animation videos to learn basic concepts and technical terms related to chemical management systems:

RSL   MRSL				
	<p>Understanding Restricted Substances</p> <p><a href="#">Watch Video</a></p>	<p>Best Practices for RSL Compliance</p> <p><a href="#">Watch Video</a></p>	<p>Introduction of Manufacturing Restricted Substance List (MRSL)</p> <p><a href="#">Watch Video</a></p>	<p>Understanding &amp; Interpreting Restricted Substance List (RSL)</p> <p><a href="#">Watch Video</a></p>
Chemical Management	 <p>Chemical Management System for Compliance</p> <p><a href="#">Watch Video</a></p>	 <p>Understanding Material Safety Data Sheet (MSDS)</p> <p><a href="#">Watch Video</a></p>	 <p>Chemical Safety &amp; Handling Training</p> <p><a href="#">Watch Video</a></p>	 <p>Wastewater Treatment 污水處理</p> <ul style="list-style-type: none"> <li>Filtering 過濾</li> <li>Oil Removal 油類清除</li> <li>Physical-Chemical Treatment 物理化處理</li> <li>Biological Purification 生物淨化</li> <li>Decolouring 漂白</li> <li>Neutralisation 中和</li> </ul> <p><a href="#">Watch Video</a></p>
	 <p>Guidelines for Hazardous Wastes Management</p> <p><a href="#">Watch Video</a></p>	 <p>Risk Assessment of Chemicals</p> <p><a href="#">Watch Video</a></p>		









## CONTACT DETAILS

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If you need any assistance or if you have any questions do not hesitate to contact us: [detox@tchibo.de](mailto:detox@tchibo.de)