



Friend of the Earth Standard

FOE – Textile

Standards and indicators for the certification of sustainable textile manufacturing.



Friend of the Earth
Via Cappuccini 8 - 20122 Milano
info@friendoftheearth.org
www.friendoftheearth.org

REV	DATE	REASON	DRAFTED BY	APPROVED BY
0	19/11/2019	New issue	Andrea Aristei	Paolo Bray
1	04/08/2023	Adaptation to Upcycling and Recycling	Paolo Bray	Paolo Bray
2				
3				



CLASSES OF REQUIREMENTS:

1. ORIGIN OF RAW MATERIALS USED FOR MANUFACTURING PROCESSES
2. SOCIAL AND ENVIRONMENTAL MANAGEMENT SYSTEM
3. LEGAL CONFORMITY
4. USE OF HAZARDOUS SUBSTANCES
5. TEXTILE MANUFACTURING SYSTEM
6. WATER RESOURCES
7. ATMOSPHERIC EMISSIONS CONTROL
8. WASTE MANAGEMENT
9. ENERGY MANAGEMENT
10. SOCIAL ACCOUNTABILITY

ANNEX 1



Description of the unit of certification:

This document should only be filled out by the certification body and the auditor in charge of the audit. It should be filled out in each native language or in English, if spoken fluently. If the unit of certification is part of a cooperative, the audit should be carried out annually on a homogeneous sample, at least equal to the root square of the total of the companies belonging to the cooperative.

a) NAME OF THE UNIT OF CERTIFICATION TO BE AUDITED:

b) NAME OF THE UNIT OF CERTIFICATION REQUESTING THE AUDIT:

c) IS THE UNIT OF CERTIFICATION TO BE AUDITED PART OF A GROUP?

d) ADDRESS OF THE UNIT OF CERTIFICATION TO BE AUDITED:

e) NAME AND CONTACT DETAILS OF THE PERSON RESPONSIBLE FOR THE UNIT OF CERTIFICATION:

f) NAME OF THE MANUFACTURED TEXTILE FIBER AND SCIENTIFIC NAME OF THE SPECIE FROM WHICH IT IS OBTAINED:

Name of the textile fiber	Species scientific name

g) SITES INCLUDED IN THE SCOPE OF CERTIFICATION:

Company name	Address	Notes



i) DESCRIPTION OF THE MANUFACTURING TECHNIQUES:

l) ACTIVITIES OF THE UNIT OF CERTIFICATION TO BE AUDITED:

- pre – processing
- final processing
- importing
- exporting
- distribution
- others (describe) _____

m) DESCRIPTION OF THE FINISHED PRODUCT:

n) BRANDS ASSOCIATED WITH THE FINISHED PRODUCTS (list of the brands under which the product is sold. Where available, include pictures of the brands):

o) DESCRIPTION AND LOCATION OF WAREHOUSES (to guarantee the traceability of products):

p) TOTAL NUMBER OF EMPLOYEES:



q) ENVIRONMENTAL CERTIFICATIONS AND AWARDS:

r) ADDITIONAL INFORMATION/COMMENTS:



- The **Friend of the Earth** project was introduced (if not, the auditor shall provide a short description).
- The unit of certification was informed of the opportunity, in case of approval, of using the **Friend of the Earth** logo on the certified products.
- The unit of certification has a copy of the organogram confirming the roles of the staff carrying out the audit.
- The duration of the audit was agreed upon.
- The information included in the preliminary information form was confirmed (in the case of changes, provide an updated version).

CERTIFICATION BODY:	AUDIT TEAM:	AUDIT START AND END DATE: Start: End:
SIGNATURE OF THE AUDITOR:	NAME OF THE PERSON IN CHARGE OF THE UNIT OF CERTIFICATION AND ACCOMPANYING THE AUDITOR DURING THE AUDIT:	AUDIT CODE:



NOTES TO THE AUDITOR:

- 1) The auditor shall fill out all field in the checklist;
- 2) The auditor shall read the guidelines on the compilation of the checklist highlighted in the green boxes;
- 3) The auditor shall provide an explanation when requirements are not applicable;
- 4) The auditor shall answer YES (Y) when the unit of certification complies with the requirements and No (N) when it does not;
- 5) The auditor shall comment and explain the positive or negative answers. Simple “Yes”, “No” or “Not Applicable” are insufficient. Each relevant document shall be added to the final audit report in a separate and numbered attachment;
- 6) Each relevant document shall be added to the final audit report in a separate and numbered attachment;
- 7) Photographic evidence added to the checklist or attached are appreciated.

LEVEL OF IMPORTANCE OF THE REQUIREMENTS

Essential requirements

The unit of certification shall be 100% compliant with essential requirements to be recommended for certification by the certification body. Failure to comply with essential requirements in a major non-conformity. To achieve certification, corrective actions shall be implemented within three months from the date of assessment of non-conformities. The unit of certification shall provide the certification body with satisfactory evidence of correction of all major non-conformities. Exclusively for the correction of the requirement 2.1 due to its more complex nature, six months are allowed.

Important requirements

The unit of certification shall be 100% compliant with important requirements to be recommended for certification by the certification body. Failure to comply with important requirements is a minor non-conformity. To achieve certification, the unit of certification shall propose a corrective action plan (declaration of intents and action plan) within maximum four months from the date of assessment of the non-conformities, to the satisfaction of the certification body. In the proposal, the unit of certification shall include the timeframe for the implementation of each corrective action. The maximum time allowed for the implementation of each corrective measures is one year.

Recommendations

It is not compulsory for the unit of certification to comply with recommendations to achieve certification. Nonetheless, compliance with recommendations shall be verified during the audit and any non-conformity shall be highlighted un the audit report as a “recommendation”. The unit of certification shall inform the certification body, during the following audit, regarding any corrective measures implemented.

Requirements that are not applicable to the audited unit of certification will be marked with “N.A.”

Legend:

E = Essential

I = Important

R = Recommendation



1 – ORIGIN OF RAW MATERIALS USED FOR MANUFACTURING PROCESSES

N°	Requirement	Level	Y/N	Comments
1	Products originating 100% from upcycling or recycling do not need to be verified against the requirements 1.1 to 1.7 (Not Applicable). All products, parts of products and fabrics which are not 100% upcycled nor recycled, will have to provide conformance to requirements 1.1 to 1.7.	E		
1.1	Raw materials of plant origin used in the manufacturing processes shall comply with the FOE standards for sustainable agriculture.	E		
1.2	Raw materials of animal origin used in the manufacturing processes shall comply with the FOE standards for sustainable livestock farming.	E		
1.3	The synthetic fibers used in the manufacturing process are completely recycled and non-toxic.	E		
1.4	The artificial fibers (viscose) used in the manufacturing processes are obtained without the use of chemicals dangerous to the environment.	E		
1.5	When possible, the unit of certification shall recycle non-toxic manufacturing waste derived from transformation processes within or outside of the unit.	I		
1.6	Recycled natural, artificial and synthetic fibers reach or exceed 50% of the total amount of textile fibers used in the manufacturing process.	R		
1.7	The unit of certification manages to keep separate the manufacturing processes using FOE certified raw materials or in accordance with the requirements 4.1, 4.2, 4.3, 4.4, from those using non-certified raw materials.	E		
1.8	Traceability of raw materials used in the manufacturing processes			
1.8.1	The unit of certification uses a traceability system that allows to retrace, starting from the end product, all the raw materials used during the production phase.	E		
1.8.2	The unit of certification shall provide the origin and composition of the natural and/or recycled raw materials used during the manufacturing process.	E		



2 – SOCIAL AND ENVIRONMENTAL MANAGEMENT SYSTEM

N°	Requirement	Level	Y/N	Comments
2.1	The unit of certification has a social and environmental management system inclusive of the necessary policies, programs, procedures and logbooks confirming compliance with the requirements of this standard.	E		
Compliance with requirement 1.1 can be confirmed based on documents such as: incident logs, maintenance records, etc.				
2.2	The unit of certification has appointed a person responsible for verifying the compliance with the social and environmental management system.	E		
2.3	All documentation related to the social and environmental management systems has been compiled and filed for at least three years.	I		
2.4	The unit of certification has conducted a Life Cycle assessment study (LCA) on its production system.	R		
The audit must have access to the supporting documentation allowing to verify the compliance with the above requirements.				
2.5	Personnel management			
2.5.1	The unit of certification has an effective system that prevent people from accessing working facilities without authorization.	I		
2.5.2	Where necessary, the unit of certification shall provide a training to the internal and external staff of the organization and keep a record of the training activities performed. Specify whether there will be any training targeting issues related to environmental aspects and the prevention of dangerous practices in the workplace.	I		
Compliance with requirement 1.5.2 can be verified through evidence of the fulfillment of the external training required by the law.				
2.6	Emergency procedures			



2.6.1	The unit of certification has implemented a system to efficiently deal with emergency situations. Verify the following elements: map or company address, contact person, list of emergency numbers, location of the nearest telephone, location of fire extinguishers, location of the centralized electricity switches, water and gas faucets.	I		
2.6.2	In the event of environmental accidents (ex. dispersion of polluting substances), the unit of certification can rely on procedures that ensure the implementation of appropriate corrective actions.	I		
2.7	Equipment maintenance			
2.7.1	All machinery is kept in good condition to prevent breakages and anomalies that could cause environmental pollution.	I		

3- LEGAL CONFORMITY

N°	Requirement	Level	Y/N	Comments
3.1	The unit of certification shall provide evidence of the conformity of the production processes with all applicable local, federal, state, and international environmental laws and regulations.	E		

The auditor shall examine the documentary evidence provided by the authorities in support of the requirement 2.1, at least for one applicable environmental law or regulation in force.

4- USE OF HAZARDOUS SUBSTANCES

N°	Requirement	Level	Y/N	Comments
4.1	The use of substances potentially dangerous for the environment is not allowed during any of the transformation phases of the textile fibers (H400, H410, H411, H412, H413, H420).	E		
4.2	The unit of certification doesn't use substances containing heavy metals at any stage of textile fibers processing.	I		



4.3	Chemical products and other substances harmful to the environment and to human health shall be handled safely to avoid environmental pollution or pose a threat to the safety of people.	E		
4.4	The purchase, storage, transportation, use and disposal of these products must follow the instructions given by the current legislation, in order to avoid problems for workers and environmental pollution.	E		

The auditor must be able to examine the documentary evidence in support of the compliance with the above requirements.



5- TEXTILE MANUFACTURING SYSTEM

N°	Requirement	Level	Y/N	Comments
5.1	Bleaching			
5.1.1	The unit of certification handles oxidizing and/or reducing agents to neutralize their potential dangerousness and that of their by-products once released in the environment.	E		
5.1.2	The unit of certification uses the best available low temperature bleaching techniques. It uses catalysts and stabilizers of the oxidizing and/or reducing agent specifically conceived to minimize the environmental impacts.	E		
5.2	Dyeing			
5.2.1	The unit of certification uses non-toxic dyes specially designed to minimize environmental impacts.	E		
5.2.2	The unit of certification doesn't use dispersed dyes.	E		
5.2.3	The unit of certification uses a dyeing system that avoids the presence of dye residues in the wastewater.	R		
5.2.4	The unit of certification is committed to implementing the use of completely biodegradable coloring substances within the third year of accreditation.	R		
5.3	Finishing			
5.3.1	The unit of certification uses the best available finishing techniques in terms of environmental impact, water and energy consumption.	I		
5.3.2	Any dangerous substances used during the finishing process are handles to neutralize all the potentially harmful effects on the environment and on human health.	E		



5.3.3	The unit of certification is committed to performing only physical treatments (thermal and/or mechanical) and/or with natural substances (ex. beeswax and aloe vera).	I		
-------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------	---	--	--

Requirements 5.1.1, 5.2.3, 5.3.2 are considered satisfied even if the unit of certification delegates the disposal of hazardous substances to specialized companies. The unit of certification shall provide adequate documentation showing the agreement between the parties.

6– WATER RESOURCES

N°	Requirement	Level	Y/N	Comments
6.1	Surface and underground water			
6.1.1	The quality of the water used for production purposes, both inbound and outbound from the production facilities, shall be analyzed at least once a year.	E		
The auditor must verify the origin of the water used by the unit of certification (stream, aqueduct, etc.).				
6.2	All the surface or underground water used and discharged by the unit of certification for production purposes must have received concessions and permits from the competent legal or environmental authorities.	E		
6.3	The unit of certification must not discharge nor deposit industrial wastewater without previously having analyzed the water and ensured its compliance with the legal requirements. Furthermore, the physical and biochemical characteristics of the wastewater shall not alter the quality of the receiving body of water.	E		
6.4	In the absence of legal requirements, the discharged wastewater must meet the minimum criteria given in the table in ANNEX 1.			



7- ATMOSPHERIC EMISSIONS CONTROL

N°	Requirement	Level	Y/N	Comments
7.1	The unit of certification identified the emission sources of GHG during the production phase and set objectives for their reduction and strategies to achieve them.	E		
7.2	The unit of certification identified the sources of dust and particulate matter emissions and set objectives for their reduction and strategies to achieve them.	E		
7.4	The unit of certification does not use products/substances contributing to the ozone layer.	E		

8- WASTE MANAGEMENT

N°	Requirement	Level	Y/N	Comments
8.1	The discard of organic and inorganic waste shall not have an adverse effect on the surrounding environment and the facilities itself (ex. causing dispersion or runoff).	E		
8.2	The unit of certification has put in place procedures for the separation of organic and inorganic waste to facilitate their reuse or recycling (for ex. pallets, wood, paper, cardboard and waste deriving from the manufacturing process).	E		
8.3	The unit of certification reuses or recycles the entire or part of the waste derived from inorganic materials that can be reused or recycled according to local regulations on separate collection).	E		
8.4	Containers, packaging and other disposable materials			
8.4.1	Provision is made for implementing a method of preserving the materials used in the transformation phases of the textile fiber. Where available, provide a description.	I		



8.4.2	Provision is made for implementing the disposal of materials and substances used in the transformation phases of the textile fiber. Where available, provide a description.	I		
8.4.3	External companies specialized in waste management are involved.	I		
8.4.4	There is evidence of the correct disposal of waste (delivery notes, other relevant documents).	I		
8.4.5	The unit of certification implemented a strategy aiming at packaging reduction for the finished product, which takes into consideration the environmental impact of their production, distribution and disposal.	I		

The auditor is in charge of collecting the necessary documentation to verify the methods of waste disposal implemented by the unit of certification and include a brief description.

9– ENERGY MANAGEMENT

N°	Requirement	Level	Y/N	Comments
9.1	The total energy consumption from the manufacturing processes carried out by the unit of certification shall be calculated once a year and must include: 1. Direct consumption of energy acquired from outside sources (renewable or not); 2. The production and consumption of renewable energy derived from internal sources; 3. The fuels used for transportation and for the operation of the plant. 4. The use and production of grey energy (for ex. input, packaging, equipment).	I		



9.2	The unit of certification outlined objectives for the improvement of the energy efficiency (including the calculation of the energy used per unit of finished product), as well as strategies and evaluation methods to achieve these objectives.	I		
9.3	The unit of certification is committed to obtaining the energy required for its operations from renewable energy systems.	I		

10– SOCIAL ACCOUNTABILITY

N°	Requirement	Level	Y/N	Comments
10.1	The unit of certification shall respect human rights, complying with the following requirements:			
10.1.1	Respect the international regulations and ILO on child labor.	E		
10.1.2	Pay the employees adequate salaries compliant, at least with the minimum legal wages.	E		
10.1.3	Grant access to health care to each employee.	E		
10.1.4	Apply safety measures required by the law.	E		
10.1.5	The unit of certification adequately trains its employees in charge of handling dangerous substances, on the risk and on their correct management practices. Besides, the unit of certification must ensure that the personnel is provided with personal protection equipment (PPE) and that they are used correctly.	E		
10.1.6	Obtain the certification SA8000.	R		

The auditor must verify the compliance with the requirements through documented evidence (copies of employment contracts) and observations of the conditions on the workplace.



ANNEX 1 – Emission limit values in surface water, sewer and on the soil

N.	PARAMETERS	UNIT OF MEASURE	DISCHARGE INTO SURFACE WATERS	DISCHARGE INTO SEWAGE SYSTEM	DISCHARGE ON THE SOIL
1	pH		5,5 – 9,5	5,5 – 9,5	6 - 8
2	SAR*		/	/	10
3	Temperature	C°	30	35	/
4	Color		Imperceptible following a 1:20 dilution	Imperceptible following a 1:40 dilution	Imperceptible following a 1:40 dilution
5	Odor		It should not be overwhelming	It should not be overwhelming	It should not be overwhelming
6	Coarse materials		Absent	Absent	Absent
7	Total Solid Waste	mg/l	≤ 80	≤ 200	≤ 25
8	BOD5 (as O ₂)	mg/l	≤ 40	≤ 250	≤ 20
9	COD (as O ₂)	mg/l	≤ 160	≤ 500	≤ 100
10	Aluminum	mg/l	≤ 1	≤ 2	≤ 1
11	Arsenic	mg/l	≤ 0,5	≤ 0,5	≤ 0,05
12	Barium	mg/l	≤ 20	≤ 20	≤ 10
13	Beryllium	mg/l	≤ 0,1	≤ 0,1	≤ 0,1
14	Boron	mg/l	≤ 2	≤ 4	≤ 0,5
15	Cadmium	mg/l	≤ 0,02	≤ 0,02	0
16	Chromium total	mg/l	≤ 2	≤ 4	≤ 1
17	Chromium VI	mg/l	≤ 0,2	≤ 0,2	0
18	Iron	mg/l	≤ 2	≤ 4	≤ 2
19	Manganese	mg/l	≤ 2	≤ 4	≤ 0,2
20	Mercury	mg/l	≤ 0,005	≤ 0,005	0
21	Nickel	mg/l	≤ 2	≤ 4	≤ 0,2
22	Lead	mg/l	≤ 0,2	≤ 0,3	≤ 0,1
23	Copper	mg/l	≤ 0,1	≤ 0,4	≤ 0,1
24	Selenium	mg/l	≤ 0,03	≤ 0,03	≤ 0,002
25	Tin	mg/l	≤ 10	≤ 10	≤ 3
26	Vanadium	mg/l	≤ 0,1	≤ 0,1	≤ 0,1



27	Zinc	mg/l	≤ 0,5	≤ 1	≤ 0,5
28	Total cyanide (as CN)	mg/l	≤ 0,5	≤ 1	0
29	Active Chlorine	mg/l	≤ 0,2	≤ 0,3	≤ 0,2
30	Sulphide (as H ₂ S)	mg/l	≤ 1	≤ 2	≤ 0,5
31	Sulphites (as SO ₃)	mg/l	≤ 1	≤ 2	≤ 0,5
32	Sulphate (as SO ₄)	mg/l	≤ 1000	≤ 1000	≤ 500
33	Chloride	mg/l	≤ 1200	≤ 1200	≤ 200
34	Fluoride	mg/l	≤ 6	≤ 12	≤ 1
35	Total phosphorus (as P)	mg/l	≤ 10	≤ 10	≤ 2
36	Ammoniacal nitrogen (as NH ₄)	mg/l	≤ 15	≤ 30	/
37	Nitrous nitrogen (as N)	mg/l	≤ 0,6	≤ 0,6	/
38	Nitric nitrogen (as N)	mg/l	≤ 20	≤ 30	/
39	Total nitrogen (as N)	mg/l	/	/	15
40	Vegetal/animal fat and oils	mg/l	≤ 20	≤ 40	/
41	Total hydrocarbons	mg/l	≤ 5	≤ 10	≤ 0
42	Phenols	mg/l	≤ 0,5	≤ 1	≤ 0,1
43	Aldehydes	mg/l	≤ 1	≤ 2	≤ 0,5
44	Organic aromatic solvents	mg/l	≤ 0,1	≤ 0,2	≤ 0,01
45	Organic nitrogen solvents	mg/l	≤ 0,1	≤ 0,2	≤ 0,01
46	Total surfactants	mg/l	≤ 2	≤ 4	≤ 0,5
47	Chlorinated solvents	mg/l	≤ 1	≤ 2	0
48	Acute toxicity test	mg/l	Total immobilized organisms after 24 hours ≤ 50%	Total immobilized organisms after 24 hours ≤ 80%	Total immobilized organisms after 24 hours ≤ 50%

* Sodium adsorption ratio



CONCLUSIONS:

- The manufacturing process COMPLIES with Friend of the Earth requirements.
- The manufacturing process DOES NOT COMPLY with Friend of the Earth requirements.

The auditor found the following non-conformities:

MAJOR NON-CONFORMITIES

(to be corrected within 3 months)

N°	Requirement	Level	Y/N	Comments

MINOR NON-CONFORMITIES

(corrective plan to be produced within 4 months and correction within one year)

N°	Requirement	Level	Y/N	Comments

RECOMMENDATIONS

(to be communicated within the next inspection)

N°	Requirement	Level	Y/N	Comments

ADDITIONAL COMMENTS