Manual K15012
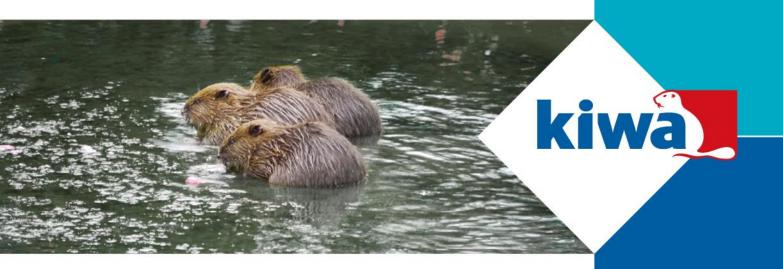July 2020

Kiwa Castor Gaea Manual

Kiwa Covenant for Circular Economy aspects of products and or processes.

Validation
This manual has been validated by the responsible Division Director of Kiwa in July 2020.

1 Introduction

1.1 General

This manual includes all relevant requirements which are used by Kiwa as the basis for granting the Castor Gaea logo and certificate for products, materials and processes.

For this manual compliance can be demonstrated through a combination of meeting the requirements of other recognised certification schemes and additional requirements*), both possibilities described with this manual.

*) additional requirements shall be based on a Kiwa Guideline (BRL) or a Kiwa Covenant.

The procedure as described in Kiwa Manual K15013 is followed for granting the certificate.

For the performance of its certification work, Kiwa is bound to the requirements as included in the clause 4.6 "conditions and procedures for granting, maintaining, extending, suspending and withdrawing certification" of NEN-EN-ISO/IEC 17065.

1.2 Field of application / scope

This manual is used to certify products, materials and processes that meet requirements resulting in improvements in the environment and sustainability aspects.

1.3 Principle

Granting the Castor Gaea is based on the following principle:

In the (Quality) system of the supplier all relevant elements concerning the Circulair Economy are incorporated.

Secondly the product or process shall meet the "Circular Economy" based requirements according to this Manual K15012 before the certificate can be granted.

1.4 Acceptance of test reports provided by the supplier

If the supplier provides reports from test institutions or laboratories to prove that the products meet the requirements of the Covenant, the supplier shall prove that these reports have been drawn up by an institution that complies with the applicable accreditation standards, namely:

- NEN-EN-ISO/IEC 17020 for inspection bodies;
- NEN-EN-ISO/IEC 17021 for certification bodies certifying systems;
- NEN-EN-ISO/IEC 17024 for certification bodies certifying persons;
- NEN-EN-ISO/IEC 17025 for laboratories;
- NEN-EN-ISO/IEC 17065 for certification bodies certifying products.

1.5 Quality declaration

The quality declaration to be issued by Kiwa based on this Manual K15012 (Kiwa Covenant/Certificate for Circular Economy aspects of products and or processes) is an inseparable part of a quality declaration according to:

1. a Kiwa Guideline (BRL);
2. Kiwa Manual K15013 (Covenant, see definitions).

2 Terms and definitions

In this manual the following terms and definitions are applicable:

2.1 Supplier
The party that is responsible for ensuring that the products meet and continue to meet the requirements on which the certification is based.

2.2. Product group
Products, components or materials that have a similar material composition for the same application.

2.3 Product requirements
Requirements made specific by means of measures or figures, focusing on (identifiable) characteristics of products and containing a limiting value to be achieved, which limiting value can be calculated or measured in an unequivocal manner.

2.4 Pre-certification tests
Tests in order to ascertain that all the requirements recorded in the manual are met.

2.5 Product, Process certificate
A document, in which Kiwa declares that a product may, on delivery, be deemed to comply with the product specification recorded in the product certificate.

2.6 Covenant
A Covenant is a statement of endorsement, which means an explicit statement of approval, always in relation to the content of that specific Covenant.

2.7 Claim
A statement quantifying one or more aspects of a product or process that is – within the framework of the Kiwa Covenant– based on verified evidence.

2.8 CSR
Corporate Social Responsibility is a form of corporate self-regulation integrated into a business model. CSR policy functions as a self-regulatory mechanism whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards and national or international norms.

2.9 Traceable - Traceability
A chronological record, set of records, or destination and source of records that provide documentary evidence of the sequence of activities that have affected at any time a specific operation, procedure or event. Also, traceability refers to the completeness of the information about every step in a supply system.

2.10 ILO

The **International Labour Organization** (**ILO**) is a United Nations agency dealing with labour issues, particularly international labour standards, social protection, and work opportunities for all

In 1998, the 86th International Labour Conference adopted the *Declaration on Fundamental Principles and Rights at Work*. This declaration contains four fundamental policies:

1. The right of workers to associate freely and bargain collectively;
2. The end of forced and compulsory labour;
3. The end of child labour; and
4. The end of unfair discrimination among workers.

2.11 Circulair Economy

Circular Economy is an economical system in which the use of resources and the production of waste is minimized.

2.12 Recycleable Recycleability

characteristic of a product, packaging or associated component that can be diverted from a waste stream through available processes and programmes and can be collected, processed and returned to use in the form of raw materials or products.

2.13 Remanufacturing and refurbishment

Remanufacturing and refurbishment are the industrial process whereby used products referred to as 'cores' are restored. It is a process of recapturing the value added to the material when a product was first manufactured. The process can be performed on either entire products or the parts that constitute the product.

2.14 Life Cycle Analysis

The goal of LCA is to compare the full range of environmental effects assignable to products and services by quantifying all inputs and outputs of material flows and assessing how these material flows have an impact on the environment.

2.15 Second life products

Second life products are products that are reintroduced in the economic circuit. Those products no longer correspond to the initial consumer's needs.

3 Procedure for granting the quality declarations

3.1 Pre-certification tests
The pre-certification tests to be performed are based on the (product) requirements as included in this manual including the test methods and contain, depending on the nature of the product to be certified:
- type testing to determine whether the products comply with the product and/or functional requirements,
- production Process Assessment,
- assessment of the quality system and the IQC-scheme,
- assessment on the presence and functioning of the remaining procedure.

3.2 Granting the quality declarations
After finishing the pre-certification tests the results are presented to the person deciding on granting of the certificate. This person evaluates the results and decides whether the certificate can be granted, or additional data and/or tests are necessary.

4 Product Requirements

4.1 General
The certificate with Castor Gaea logo can be granted, when all requirements as defined by clause 4.1.1, 4.1.2 and 4.1.3 are met.

4.1.1 Specific requirements
No product, material or process shall be granted, before is proven all aspects as defined by the relevant standard (BRL and or Covenant) are met.

4.1.2 Basic Requirements
The basic requirements are according to clause 4.2.

4.1.3 Rating per aspect
A Scoring Methodology is followed according to the rating aspects in paragraph 4.3.
A minimum score of **45** points is required and there is no maximum score.

Remark: the by Kiwa declared values are each year evaluated and can be subject to change.

4.1.4 Innovative products and or processes
Innovative products or processes that gain insufficient amount of points to be directly rewarded with Kiwa Castor Gaea and which clearly contribute to the fulfilling of the key elements of the circular economy, can still be rewarded with the Kiwa Castor Gaea recognition, provided:
- That the product development is in its early stages of its development.
- That the product or process clearly is intended to contribute to prolonging the lifetime of a product, reducing waste and or energy, reducing the CO_2 footprint, etc.
- That the product or process is recognized by Kiwa as doing so.

In those cases, the decision maker decides to reward the product in this special case with a Castor Gaea logo.

4.2 Basic Requirements

For the basic requirements all aspects in table 1 shall be met.

Table 1 – Basic requirements

Management system	
No.	**Aspects**
4.2.1	The organization shall have a written policy how to deal with the principles for improvement and sustainability aspects as described in this manual K 15012.
4.2.2	The organization shall establish, implement and maintain a procedure(s) • to identify and have access to all applicable local, national and ratified international laws and regulations by which the organization is bound;

	• to determine how these laws and regulations apply to the implementation of its policy established in clause 4.2.1.	
4.2.3	The management system provides instructions concerning suppliers related subjects.	
4.2.4	The management system provides instructions to responsibly deal with raw materials, natural resources, emissions and waste.	

	Policy	
4.2.5	The organization has a management statement for the organization about the relevance of complying with Article 4.2.1 to 4.2.4.	

	Legal rules	
4.2.6	The organization has identified which legal requirements, protocols, licenses, brands, product labels, certificates, etc. are required.	
4.2.7	The organization has filed the corresponding documents demonstrable.	

	ILO principles	
4.2.8	The organization is following a general policy concerning the accepted social responsibility for her employees.	

	Re-use of materials	
4.2.9	The Organisation: has a policy and measurable objectives regarding re-use of materials has established objectives, targets and authentication methods.	
4.2.10	The organization has set up a system for the characterization of used recycling materials.	

4.3 Rating per aspect
All aspects under this clause are rated with a value, see also clause 4.1.3.

Table 2 - Organizational Management Requirements

No.	Description of the requirement	value
4.3.1	The organization has a environmental management system that meets the requirements of ISO 14001 or equivalent, certified by an accredited organization.	3
4.3.2	The organization has a quality management system that meets the requirements of ISO 9001 or equivalent, certified by an accredited organization.*) *) not countable in relation with point 4.3.3 until 4.3.5	3
4.3.3	The organization has a CSR certification on level 3.	7

4.3.4	The organization has a CSR certification on level 4.	18
4.3.5	The organization has a CSR certification on level 5.	25

4.3.6	The organization has established a policy in which a risk analyses is foreseen to evaluate producers according to the standards of the ILO where appropriate. In case of infringement with the ILO principles Castor Gaea cannot be granted.	5
Circular Economy Aspects: Recycled materials		**Value**
4.3.7	At least 40% of the recycled material suppliers have implemented a system which ensures the traceability of its products manufactured according to EN 15343 or equivalent.	5
4.3.8	At least 40% of recycled material suppliers have implemented a system for the characterization of recycling materials according to EN 15347 or equivalent.	5

Traceability of supplies		**Value**
4.3.9	The management of the organization must ensure that the raw materials used are traceable from their originally supplier(s).	4

Environment, Safety		**Value**
4.3.10	At least 40% of the suppliers of raw materials are ISO 14001 certified.	2
4.3.11	At least 60% of the suppliers of raw materials are ISO 14001 certified.	4
4.3.12	At least 90% of the suppliers of raw materials are ISO 14001 certified.	6

Circular Economy Aspects: Re-use of materials		**Value**
4.3.13	The Organisation; • has a policy and measurable objectives regarding re-use of materials; • has established objectives, targets and authentication methods; • reports them to stakeholders; • has these matters verified by a third party.	4
4.3.14	The organization shows the % processed materials per ton of product, in accordance with the stated policies and measurable objectives.	7

		Circular Economy Aspect: **Product design**	**Value**
4.3.15		The design has taken into account a maximum potential recyclability through the use of a homogeneous (mono) material or compatible materials.	6
4.3.16		The design has taken into account a maximum energy saving during production.	6
4.3.17		The design has taken into account a maximum energy saving during its operational lifetime.	6
4.3.18		The design has taken into account a maximum recyclability (intended use for second life products).	6
4.3.19		The design has taken into account the possibility of refurbishment.	6
		CO_2 emission	**Value**
4.3.20		The Organisation; - has a policy and measurable objectives on CO2 reduction in line with the ambitions of the government and the industry; - has established in that respect objectives, targets and authentication methods; - reports them to stakeholders; - has these matters verified by a third party.	4
4.3.21		The organization provides the CO2 emissions per ton of product in accordance with the policies applicable standards and measurable objectives.	8
		Waste Streams	**Value**
4.3.22		The Organisation; - has a policy and measurable targets for reducing the landfilling or incineration of waste; - has established in that respect objectives, targets and authentication methods; - reports them to stakeholders; - has these matters verified by a third party.	1
4.3.23		The organization has identified in relation to these reduction goals, targets and authentication methods.	2
4.3.24		The organization reports this reduction to stakeholders.	2
4.3.25		The reporting in relation to this production has been verified by a third party.	2

4.3.26	The organization provides per tonne of product the tonnages of relevant waste streams in accordance with the policies and measurable objectives.	4

Water extraction		**Value**
4.3.27	The Organisation; • has a policy and measurable targets for reducing the extraction of water; • has established in that respect objectives, targets and authentication methods; • reports them to stakeholders; • has these matters verified by a third party.	4
4.3.28	The organization has regarding reduction of water extraction objectives, targets and authentication methods set.	2
4.3.29	The reporting regarding water extraction has been verified by an external party.	3
4.3.30	The organization shows the % of extracted water per ton of product per well (surface, soil, drinking water, etc.).	4

Life Cycle Analysis		**Value**
4.3.31	The organization draws up environmentally relevant product data (LCA's).	3
4.3.32	The organization has a Type III environmental declarations for the products examined.	4
4.3.33	The organization reports to stakeholders.	4

Reliable product information		**Value**
4.3.34	The organization ensures the development, compliance and continual improvement of policies to ensure that labels, product information leaflet etc. buyers of products and services adequately inform on the envisaged application, users' risk and product performance.	5

5 Marking

In relation with the certification mark (5.3) the information under this chapter shall be available to the user.

5.1 For products or materials
- name or logo of the manufacturer;
- data or code indicating the date of production;
- type indication.

This information can be presented clearly readable on the product or on the packaging for products and materials.

5.2 For processes
For processes a certificate shall be available to be presented.

5.3 Certification mark
After concluding a Kiwa certification agreement, the certified product, material or process shall be, beside the marks indicated in the respective standards, be indelible presented with the logo below:

The LOGO shall be presented together with the certification number.

The latest version of the certificate can be found on the Kiwa site www.kiwa.nl
Under 'certified companies & organizations'

Click on this tab and fill in the certification number in the blank space.

6 Agreements on the implementation of certification

6.1 General
Beside the requirements included in this Manual, the general rules for certification as included in the Kiwa Regulations for Certification also apply.

These rules are in particular:
- The general rules for conducting the pre-certification tests, in particular:
  - o the way suppliers are to be informed about how an application is being handled;
  - o how the test is conducted;
  - o the decision to be taken as a result of the pre-certification tests.
- The general rules for conducting inspections and the aspects to be audited,
- The measures to be taken by Kiwa in case of Non-Conformities,
- The measures taken by Kiwa in case of improper use of Certificates, Certification Marks, Pictograms and Logos,
- Terms for termination of the certificate,
- The possibility to lodge an appeal against decisions of measures taken by Kiwa.

6.2 Certification staff
The staff involved in the certification may be sub-divided into:
- Certification assessor (**CAS**): in charge of carrying out the pre-certification tests and assessing the inspectors' reports;
- Site assessor (**SAS**): in charge of carrying out external inspections at the supplier's works;
- Decision maker (**DM**): in charge of taking decisions in connection with the pre-certification tests carried out, continuing the certification in connection with the inspections carried out and taking decisions on the need to take corrective actions.

6.2.1 Qualification requirements

The following qualification requirements have been for the subject matter of this evaluation guideline (see Table 3):

Table 3 – Qualification requirements of certification staff.

Basis requirements	Evaluation criteria
Knowledge of company processes Requirements for conducting professional audits on products, processes, services, installations, design and management systems.	*Relevant experience: in the field* **SAS, CAS** : 1 year **DM**: 5 years inclusive 1 year with respect to certification Relevant technical knowledge and experience on the level of: **SAS**: High school (MBO) **CAS, DM** : Bachelor (HBO)
Competence for execution of site assessments. Adequate communication skills (e.g. reports, presentation skills and interviewing technique).	**SAS**: Kiwa Audit training or similar and 4 site assessments including 1 autonomic under review.
Execution of initial examination	**CAS**: 3 initial audits under review.
Conducting review	**CAS**: conducting 3 reviews

	Certification assessor	Site assessor	Decision maker
Education - specific	• Manual-relevant technical education • specific studies and training (know-how and skills)	• Manual -relevant technical education • specific studies and training (know-how and skills)	• not applicable.
Experience - specific	• Detailed knowledge of the Manual and 4 certification tests carried out on the basis of the BRL or similar	• Detailed knowledge of the Manual and 4 inspections carried out on the basis of the BRL or one similar.	• general knowledge of the Manual

The level of education and experience of the certification staff involved should be demonstrably recorded.

6.2.2 Qualification

The qualification of the Certification staff shall be demonstrated by means of assessing the education and experience to the above-mentioned requirements. In case staff is to be qualified on the basis of deflecting criteria, written records shall be kept.

The authority to qualify staff rests with the:
- Decision maker: qualification of Certification and Site assessors;
- Management of the certification body: qualification of Decision makers.

6.3 Report Pre-certification tests
Kiwa records the results of the pre-certification tests in a report.
This report shall comply with the following requirements:
- Completeness: the report provides a verdict about all requirements included in the evaluation guideline;
- Traceability: the findings on which the verdicts have been based shall be recorded and traceable;
- Basis for decision: the Decision maker shall be able to base his decision on the findings included in the report.

6.4 Decision for granting the certificate
The decision for granting the certificate shall be made by a qualified Decision maker which has not been involved in the pre-certification tests. The decision shall be recorded in a traceable manner.

6.5 Layout of quality declaration
The product certificate shall be in accordance with the model included in Annex I.

6.6 Nature and frequency of third party audits
The certification body shall carry out audits on site at the supplier at regular intervals to check whether the supplier complies with his obligations. At the time this Manual entered into force, the frequency of audits amounts at least one audit on site per year for suppliers with a quality management system (in accordance with ISO 9001) for their production, which has been certified by an acknowledged body (in accordance with ISO/IEC 17021) and where the IQC scheme forms an integral part of the quality management system.
In case the production of the supplier is not certified against ISO 9001, the frequency of the audits on site may be increased to at least two per year.

The audit program on site shall cover at least:
- The suppliers IQC scheme and the results obtained from inspections carried out by the supplier;
- The correct way of marking certified products;
- Compliance with required procedures.

The results of each audit shall be recorded in a traceable manner in a report.

6.7 Non conformities
When the certification requirements are not met, measures are taken by Kiwa in accordance with the sanctions policy, namely:

The procedure is published on the Kiwa site www.kiwa.nl in the Service Portal under number K15012.

7 Titles of standards

7.1 Standards / normative documents

The relevant normative documents (standards) for this evaluation guideline are listed in the Table 4.

Table 4 –Relevant normative documents/standards

Standard [*]	Title
EN-ISO 9001	Quality management systems - Requirements
NEN-EN ISO/IEC 17020	Conformity assessment - General criteria for the operation of various types of bodies performing inspection
NEN-EN ISO/IEC 17021	Conformity assessment - Requirements for bodies providing audit and certification of management systems
NEN-EN ISO/IEC 17024	Conformity assessment - General requirements for bodies operating certification of persons
NEN-EN ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
NEN-EN ISO/IEC 17065	Conformity assessment - Requirements for bodies certifying products, processes and services
Kiwa Manual K15013	Kiwa Covenants for products and processes