

IBIDEN HUNGARY KFT. Green Procurement Guidelines



September 2019



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[1] Introduction

Ibiden Group's philosophy is "IBIDEN Way" with the goal of creating new values with our suppliers and serve the world - along with ensuring the future of our corporate - through innovative technologies while respecting people and the global environment. One of our shared values is "coexistence with nature", so the environmental principle must be applied in every process of our businesses. Our company is committed to a society based on renewable environmental resources. To promote green procurement for all the goods, including raw materials, parts, and even office supplies, we work with our suppliers to support environmentally friendly product sourcing.

The purpose of green procurement is to purchase environmentally conscious products, parts and materials from suppliers, and reducing the environmental impact of our products. In order to advance our mission, we limit or replace the use of substances deemed hazardous in domestic, internal (Hungarian), international, and European Union legal systems with less dangerous materials. However, to reduce the environmental burden and risks in our business activities, it is paramount that our full supply chain behaves in the same way and provides support in our shared mission.

To promote our mission, we have prepared "Green Procurement Guidelines" in order to clarify our environmental procurement policy, and to procure materials with less environmental burden. We sincerely ask for the understanding and cooperation of our supplier suppliers to build a sustainable society with low environmental impact through green procurement.

September 2019.

Ibiden Hungary Kft.



[2] Environmental Policy of IBIDEN Hungary Kft.

Our company, aware of its responsibility for the environment, undertakes a commitment to continually improve its environmental performance, to prevent environmental load, and to run an environment-centered management system based on the ISO 14001 standard.

We have surveyed what the environmental impacts are of manufacturing our ceramic product, of our sales activity and the operation of our site, and what environmental resources we employ to carry out these activities. It is the aim of our company to utilize the resources as effectively as possible, and to reduce the quantity of waste produced in the manufacturing process, while keeping the proportion of recyclable waste at the highest possible level. These are also facilitated by the modern technical solutions used when establishing the site.

Considering all the above, IBIDEN Hungary Kft:

- ❖ Ensures the continual monitoring and execution of legal, regulatory and other requirements concerning the environmental impact of its activities.
- ❖ Regularly evaluates its environmental performance and ensures the continuous improvement of the system, as well as the prevention of environmental pollution;
- ❖ Explores, regulates and continually monitors the critical activities that have a significant actual or potential impact on the environment. Our company places special emphasis on the following:
 1. We consider the prevention of damages to be of primary importance, and we take all technologically and economically plausible measures to prevent accidental environment pollution;
 2. We continually monitor and check the emission of pollutants under normal circumstances.
 3. We endeavor to learn the circumstances of the activities of our subcontractors and suppliers possibly having an impact on the environment, and familiarizing them with our environmental requirements.
 4. We strive to reduce the company's specific resource consumption;
 5. During our activity we make efforts to reduce the amount of production waste, and to recycle the materials contained in the greatest possible degree

To achieve the above tasks, we establish environmental objectives and targets, and plan their implementation in an environmental program. The implementation of the programs is constantly monitored; objectives and targets are regularly reviewed. We need the contribution of all our employees to accomplish our tasks; therefore, besides publishing the environmental policy, we aspire to continual training of the employees and maintaining their environmental awareness.

[3] Objectives

The international trend in chemical regulation in recent years has shifted towards expanding the Precautionary Principle in chemicals risk assessment and managing the chemical content of the finished product in the supply chain. Moreover, the independent chemical management by companies and appropriate, quick information on the chemicals involved becomes more and more important.

In line with these circumstances, the IBIDEN Hungary Kft., through appropriate chemical control, voluntarily reduces hazardous chemicals, thereby reducing the environmental burden of the entire supply chain, thereby promoting environmentally friendly product sourcing to help protect the planet's environment.

This guideline has been prepared to clarify the IBIDEN Hungary Kft's core approach to green procurement and its requests towards suppliers.

We ask our suppliers to understand the meaning of the guidelines and to cooperate actively in the IBIDEN Hungary Kft's green procurement activities.

[4] Definitions of Terms

The definitions of the terms used in this Guideline are as follows:

Term Definition

| | |
|------------------------------|---|
| Green Procurement | In order to reduce the environmental load caused by our company and the entire supply chain during production, we must procure products that comply with environmental regulations from suppliers who are actively involved in environmental protection. |
| Chemical substances | any chemical element or compound, whether in the natural state or artificially produced, used or released, or released in the form of a contaminant, whether on its own or in a chemical mixture or compound, regardless of it is intentionally manufactured or marketed. |
| <u>Mixture</u> | a mixture or solution composed of two or more substances; |
| <u>Hazardous substances:</u> | all substances classified in any of the hazardous classes or categories according to the 1272/2008/EK decree (CLP) based on 2000. XXV. law about the Chemical Safety. |
| <u>Hazardous mixture:</u> | mixture or substance that contains one or more hazardous substances, that classified as hazardous |
| <u>Hazard class:</u> | the nature of the physical, health or environmental hazard; |
| <u>Hazard category:</u> | the division of criteria within each hazard class, specifying hazard severity; |

[5] Relevant items

The items covered by this policy (raw materials and manufactured goods ordered from suppliers) are listed in the table below. This policy applies to our suppliers supplying these items.

Although purchasing items (equipment, JIGs, and office supplies, etc.) other than the items specified below are not part of this policy, but for items where our company policies require the same management, submission of the documents required by this guideline might be necessary.

Item Definition

| | |
|---------------------|--|
| Device, parts | Electrical device or parts mounted in Ibiden's products. (Chip capacitor, chip resister, pins, screws, etc.) |
| Direct materials | Materials used in the production process and included in Ibiden's products or have the possibility of being mixed into Ibiden's product as impurities (Copper clad laminate, raw materials for plating, solder resist, SiC, graphite, etc.) |
| Indirect materials | Materials used in our production processes, but not included in Ibiden's product. (Detergents, chemical solutions, dry film, etc.) |
| Packaging materials | Materials used for packaging Ibiden's products for shipping (Cardboards, aluminum packaging, tapes, trays, desiccant, labels, etc.) |

[6] Substances and mixtures covered by the IBIDEN Hungary Kft's Environmental, Occupational Health and Safety Management Regulations

The activities related to the substances or mixtures (especially dangerous substances, mixtures) are planned and carried out by **IBIDEN Hungary Kft.** (hereinafter **IHU**) in such a way that the activities do not endanger the health of employees or other persons, and to prevent damaging or contaminating the environment or increase these risks.

The prohibited / restricted chemical groups at IBIDEN Hungary Kft. Are the following:

Prohibited or severely restricted chemicals:

Applicable to chemicals that are banned or severely restricted in Annex I of Regulation (EU) No 649/2012 (PIC Regulation), including industrial chemicals, pesticides and biocides such as benzene, chloroform, atrazine and permethrin. The export of these chemicals is subject to two requirements: the export notification obligation and the explicit consent.

The PIC Regulation also applies to the chemicals that are banned for export as listed in Annex V, and to all chemicals that are to be exported for labeling and packaging (which must comply with the relevant EU legislation).

Chemicals in drugs, radioactive substances, waste materials, chemical weapons, food and food additives, feed, genetically modified organisms and medicines are regulated by other EU legislation and are therefore not subject to the PIC Regulation.

The regulation does not apply to chemicals exported or imported for the purpose of research or analysis, provided that the quantities involved are unlikely to have an effect on human health or the environment and does not exceed 10 kilograms per substance exported by each exporter to each importing country per calendar year.

Chemicals that are subject to export notification, chemicals that qualify for PIC notification and chemicals that are subject to the PIC procedure are covered by Regulation (EU) No 649/2012.

Restricted chemicals under REACH:

Restrictions are tools that protect human health and the environment from unacceptable risks posed by chemicals. Restrictions generally prescribe restrictions or prohibitions on the manufacture, sales (including import) or use of a chemical, but may include any conditions, such as technical measures or specific labels.

The restriction may apply to any substance on its own, in a mixture or in a product, including those not subject to registration, such as substances manufactured or imported in quantities of less than one tons per year or certain polymers.

On-site isolated intermediates, substances used in scientific research and development and substances which pose a risk to human health only when used in cosmetic products, shall be exempt from the restriction procedure under REACH.

Annex XVII of the REACH Regulation sets restrictions on manufacturing, placing on the market and using certain dangerous substances, mixtures and articles.

Substances of Very High Concern (SVHC)

Candidate List of Substances of Very High Concern (SVHC). Article 59 (10) of REACH Regulation requires ECHA to publish and update the candidate list of substances of very high concern on the ECHA website. This candidate list is the only authentic version.

In accordance with Article 59 (10) of the REACH Regulation, the candidate list for authorization of substances of very high concern is available on the ECHA website.

Substances exempted from registration under REACH:

- ❖ Substances in Annex IV of the REACH Regulation, since sufficient information is available on these substances to be considered as low-risk due to their intrinsic properties;
- ❖ Substances in Annex V of the REACH regulation, the registration of these substances can be considered unreasonable or unnecessary, and their exemption from this title does not affect the purpose of this regulation.
- ❖ Substances exempted from registration are listed in Annex V of the REACH Regulation.

Substances subject to authorization under REACH:

- ❖ Substances that fulfill the criteria for being listed in Regulation (EC) No 1272/2008
- ❖ Annex I, Part 3, Section 3.6 'carcinogenic' hazard class 1A or 1B. category;
- ❖ Annex I, Part 3, Section 3.5 'Germ cell mutagenicity' Hazard class 1A or 1B. category;
- ❖ In accordance with Annex I, Part 3, Section 3.7, to be classified as "reproductive toxicity", hazard class 1A or 1B (adverse effects on sexual function and fertility or on development).
- ❖ Substances that are persistent, bioaccumulative and toxic in accordance with the criteria set out in Annex II of Reach Regulation;
- ❖ Very persistent and very bioaccumulative substances;
- ❖ Substances which do not fulfill the criteria of Annex XIII of the REACH Regulation, substances for which it is scientifically established that they are likely to have a significant effect on human health or the environment, and cause the same level of concern as the substances listed above, and in the case of substances of very high concern, on a case-by-case basis, in accordance with a specific procedure.

The list of substances subject to authorization is defined in REACH Regulation 14th Annex.

[7] Requests to our suppliers

For green procurement, our company requires its suppliers to adhere to the following. The requested information on the current activities of our suppliers should be provided in the documents specified in the section "Documents to be Submitted by Suppliers".

1) Requests to our suppliers (companies)

Establishment of environmental management system

Our company asks its suppliers to build and apply a continuous kaizen system for environmental load. Specifically, please complete the following items:

- ❖ Senior management shall establish, implement and maintain an officially stated Environmental Policy regarding the company's environmental performance.
- ❖ Senior management ensures that responsibilities and competencies are assigned to key roles and communicates these within the organization.
- ❖ The organization shall maintain documented information on its compliance obligations, in particular with regard to the environmental health and safety legislation relevant to its activities.
- ❖ The organization identifies the environmental aspects of its operation, products and services that it can control and influence, taking into consideration the life-cycle approach, to ensure expected results and to prevent or reduce unwanted effects, contributing to continuous improvement.
- ❖ The organization shall, at regular intervals, ensure the effective compliance of its organization with its internal and international standards through internal auditing.
- ❖ The organization should develop, implement and maintain processes for how it will prepare and respond to identified potential emergencies.
- ❖ The organization shall ensure that persons working under its supervision are aware of the organization's environmental requirements, with particular regard to the Environmental Policy, significant environmental factors and their effects, the increase in environmental performance, the consequences of non-compliance and non-compliance.

Furthermore, in order to carry out the above items as efficiently as possible, our company recommends that its suppliers obtain an Environmental Management System Certificate (eg ISO 14001).

2) Implementation of environmental activities

We ask all our suppliers to carry out the following environmental activities.

- ❖ Compliance with all air, water quality, noise, vibration, waste, etc. environmental pollution or emission limit values specified by the legislation or the company and, in case of non-compliance, their immediate correction.
- ❖ Implementation of waste prevention, reduction of the amount and hazardousness of generated waste, waste recovery and environmentally friendly disposal.
- ❖ Implementing global warming prevention activities.
- ❖ Proactive disclosure of environmental activities to the outside world.
- ❖ Green procurement.

3) Establishment of a system for controlling chemical substances contained in products

It is critical for all the makers involved in supply chain to manage the chemical substances contained in their products thoroughly so that chemical information contained in products can be effectively communicated throughout the supply chain.

IHU request suppliers to establish and implement a management system that manage the chemical substances contained in the products to be delivered to IHU. Below are the details;

- ❖ Suppliers are required to establish a company's own policy concerning control of chemical substances contained in products and have all the employees be familiar with the policy.
- ❖ Suppliers are required to determine the criteria for controlling chemical substances contained in products and identify the organizations (divisions/departments), business activities, processes and products that the control criteria must be applied.
- ❖ Suppliers are required to set the objectives and targets to control chemical substances contained in products, and manage the progress of relevant activities to meet such objectives and targets.
- ❖ Suppliers are required to ensure that the results of activities are reviewed by top management to determine such objectives and targets are achieved. Suppliers shall reflect on the results, incorporate and be assessed if reflect in the targets of following year.
- ❖ Suppliers are required to establish an organization for controlling chemical substances contained in products, and ensure that responsibilities and authorities are defined.
- ❖ Suppliers are required to identify chemicals contained in the materials/raw materials they purchase and the chemicals meet the criteria for chemical control. These verification should be done during the new product design and development process.
- ❖ When selecting their suppliers, suppliers are required to check the actual control over the chemical substances contained in the products.
- ❖ When receiving products/materials from their suppliers, suppliers are required to conduct checking periodically to ensure that chemicals contained in the products they purchase meet their criteria for chemical control.
- ❖ If suppliers have an opportunity to use chemicals banned or restricted by IHU in their process or in their outsourced process, suppliers are required to take measures to prevent any risks of such chemicals may be mixed or misused accidentally in their process where the products to be shipped to IHU are being manufactured.
- ❖ When a part or all of the production is outsourced to external contractors, suppliers are required to check their control status of chemical substances contained in the products appropriately.
- ❖ Suppliers are required to have a system that allows suppliers to check the chemical substances contained in their products at different stages of the production process and prior to its dispatch. Suppliers shall check their products against the criteria to meet the chemical control standard to ensure that their products can be dispatched from their premises only if it is confirmed that checking on defined check items are all done and meet the criteria for chemical control.
- ❖ Suppliers are required to ensure product traceability.
- ❖ Suppliers are required to create a rule for changes in chemical substances in products, as well as a system and information is disseminated rapidly and effectively to their customers before actual changes are made.
- ❖ Suppliers are required to create a rule on what kind of action should be taken to contain, control and correct the non-conforming products. (Immediate response, investigation of the cause, recurrence prevention, communication to customers, etc.)
- ❖ Suppliers are required to provide education and training on control of chemical substances contained in products and requirements on chemical control is communicated to and understood by all employees.

- ❖ Suppliers are required to create rules on product chemical substance management. Suppliers are required to develop a system to manage file/retain records properly so that suppliers can provide the information on contained chemical substances to customers as appropriate.
- ❖ Suppliers are required to check the status of chemical management by conducting internal audits or other means. If any conformities are found, suppliers are required to correct the nonconformities

[8] Documents that we request from our suppliers

We kindly ask our business suppliers to submit the following documents to the competent department of our company. In addition, we may request additional documentation, analysis results, etc. based on our clients' needs.

- ❖ Standard Safety Data Sheet (SDS) in Hungarian language (in accordance with REACH).
- ❖ REACH Declaration of Conformity Annex 1
- ❖ Chemical supplier questionnaire Annex 2
- ❖ Summarized declaration of manufacturers conformity (for the purpose of attesting the conformity of packaging with environmental requirements) Annex 3.a.
- ❖ Declaration of conformity for packaging components (for the purpose of attesting the conformity of packaging with environmental requirements) Annex 3.b.

[9] When Changes Are Made to Descriptions

When there are any changes made in the documents submitted by suppliers due to changes in the specifications of the delivered products, please note that IBIDEN personnel in charge must be informed of the changes. The relevant documents (1. Standard Safety Data Sheet (SDS) in Hungarian language (in accordance with REACH), 2. REACH Declaration of Conformity, 3. Chemical supplier questionnaire) are required again for verification to determine if changes meet the IBIDEN's standard.

For any inquiries about this Guideline, please contact us at

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