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Sanden Green Supply Guideline (9th Edition)

March 25th, 2024 Sanden Corporation



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1.Introduction

The business operation of Sanden Group (hereinafter referred to as Sanden) is worldwide and conducts business with leading companies globally. In order to maintain business relations with such companies, Sanden and its suppliers must remain first class too. In addition, Sanden and its suppliers have to develop activities that are in harmony with society as a member of the global community and carry out its corporate social responsibility role as "good corporate citizen" to move hand-in-hand with each local community. Sanden advocates "good corporate citizen" and "harmony with the society" as the first principle of the Corporate Philosophy in its conduct of business activities. Additionally, our important principal is "Environment".

Environmental preservation is an important theme for this century. It will be an increasing matter for Sanden, enterprises and stakeholders in the future.

The automotive industry is increasingly accelerating the shift to electrification of vehicles due to growing environmental awareness on a global scale and environmental regulations in many countries. Looking ahead to the year 2030, Sanden is developing new technologies to effectively utilize the thermal energy of electric vehicles in an integrated manner.

In order to promote Sanden's business activities, it is necessary for suppliers to deal with Sanden based on Sanden's Corporate Philosophy.

This "Green Supply Guideline" details Sanden's requirements of environment-friendly purchasing.

Sanden would like to request all suppliers to understand the content of "Green Supply Guideline" and promote environmental preservation activities together with Sanden.

Sanden Corporation

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2. Environmental Efforts of Sanden

"To preserve the environment to ensure that future generations will inherit our beautiful, irreplaceable earth".

This is one of Sanden's Environmental Philosophy and also a social responsibility. This mission is getting more and more serious for every company.

Sanden regards "Environmental Activities as an absolute requirement in the company's management activities, and is also an essential requirement for the company's survival and success." Sanden plans to switch from activities for pollution prevention and environmental preservation to Environmental Management.

As a Corporate Citizen developing business globally, Sanden established "Sanden Environmental Charter" in 1993. This charter was deployed globally in order to ensure environment-friendly activities in the conduct and growth of the businesses while reducing environmental burdens.

Its basic concept is "Eliminate all Muda (needlessness)".

This applies to every field of our business activities, for example, in product development, purchasing, production, logistics, sales, and so on. Sanden promoted environmental activities in all these fields based on ISO14001.

Continuous practice of environmental management is now being promoted in 46 Sanden sites globally.



Sanden Environmental Chapter

"Environment" is regarded as a universal value in Sanden's Corporate Philosophy. All Sanden staff perform eco-friendly actions based on the concept and attitude that are demonstrated in the Corporate Philosophy.

The "Sanden environmental charter" was established and deployed in each group company inside and outside of Japan to ensure the performance of such actions.

[Environmental Doctrine]

Sanden, as a worldwide corporate citizen, recognizes that preserving the earth's environment is the most-important shared responsibility of mankind. In order to pass on a safe and clean earth to the next generation, Sanden will take appropriate steps in all areas of business activities to preserve the environment.

[Environmental Principles of Action]

- 1. Sanden will establish a specific organization to promote activities to preserve the earth's environment. Environmental audits will be conducted to assure compliance, and to maintain and improve the activities.
- 2. Sanden will collect precise information regarding the environmental burden arising from these activities. Environmental objectives / targets will be set, and actions taken to continuously reduce the environmental burden as much as technologically and economically possible.
- 3. Sanden will, in addition to complying with all environmental regulations, set up voluntary environmental standards, and engage in the prevention of pollution in order to ensure further preservation of the earth's environment.
- 4. Sanden will eliminate, as far as possible, any toxic substance which causes a burden to the earth's environment through the adoption of alternative technologies, conversion into alternative materials, collection, and recycling.
- 5. Sanden will engage in saving resources and energy, recycling, and minimizing industrial waste in all areas of business activities.
- 6. Sanden will conduct in-house environmental educational for all its employees at all levels, in order to enhance consciousness of preserving the earth's environment.
- 7. Sanden will contribute to society as a community member by voluntary participation in the environmental preservation activities of the local communities.
- 8. Sanden will, in order to obtain better understanding and cooperation with regard to the preservation of the earth's environment, offer PR activities on a broad base to the community, and provide information as required.



3. "Green Supply"

(1) What is Green Supply?

Sanden defines Green Supply as procuring eco-friendly products, parts, materials, logistics, and other services from suppliers that deal with environmental activities proactively, in addition to the traditional criteria of quality, price, and delivery.

(2) Purpose of Green Supply

The purpose of Sanden's Green Supply is to promote environmental preservation together with suppliers in order to contribute to the development of a recycling-oriented society. This creates a sustainable community and nature by promoting eco-friendly products and protection of global environment.

(3) Green Supply Guideline

Green Supply Guideline explains the contents of green supply.

We would like all suppliers to understand this guideline, and to take a proactive stance to the protection of the environment.



Request of your cooperation to "Green Supply"

Our customers require us to reduce environmental burdens in the supply chain and product life cycle (procurement, production, usage, and disposal). This includes management of chemical substances of products, resource saving, energy saving, and prevention of environmental pollution.

In order to respond to such requests, Sanden will have preferential procurement from suppliers that understand and cooperate with green supply. We would like to seek your cooperation.



4. Applicable items and required actions

Applicable items and required actions are shown in the table 4-1.

- a) We put "X" at the items for which we request suppliers to take actions.
- b) "EMS" is the abbreviation of "Environmental Management System".
- c) Please see the explanation in the next and following clauses regarding the concrete actions for Green Supply.
- d) If you have any questions, please contact our Purchasing department.

Table 4-1

Required actions Items	Disclosure of the environmental information	Management of regulated and prohibited chemical substances	Construction of EMS
Raw materials, Parts and Assembly associate materials	X	X	Х
Processed Goods on commission	Х	X	Х
Facilities, Molds	Х	X	Х
Other indirect materials (Stationary, Furniture, IT equipment, and others)	X		X
Logistics	Х		Х



- 5. Request to our valuable suppliers
- (1) Disclosure of environmental information

In order to meet the European chemical substances regulation and other regulations, it is necessary for Sanden and its suppliers to respond to the request of investigation on environmental burdens from our customers in Japan and overseas within a reasonable time.

We would like all suppliers to cooperate and respond positively to requests for the investigation of environmental information.

1) Environmental burden substances investigation
When there is an investigation or inquiry on environmental burden substances in products, systems and services which you deliver to Sanden, please submit the following data:

- · IMDS
- JAPIA Unified Data Sheet
- ·chem SHERPA



(2) Management of Regulated and prohibited chemical substances

In "raw materials, parts, assembling associated materials", "Processed goods in commission", and "Facilities, mold", which are supplied to Sanden, all suppliers are requested:

- a) to guarantee that products do not contain substances prohibited by laws and ordinances, and
- b) to guarantee that they satisfy the "Standard of Objectives to be Managed" for chemical substances as required by Sanden and Customer.

Basically, you apply to Sanden in accordance with the IMDS registration guidelines.

1) Materials which are prohibited in laws and ordinances

Please see the laws and ordinances of major countries in table 5-1.

Regarding the prohibited substances, we observe these laws and ordinances, and clarify the applicable laws and ordinances in the article 2) Standard of Objectives to be Managed.

Table 5-1 Laws and Ordinances in Major Countries

Region	Law/Ordinance	Regulated/Prohibited Substances	Remarks	
	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	Subjected to the list of Class I Specified Chemical Substances of Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Please see the original sentences of the related law.	Simplified	
Japan	Industrial Safety and Health Act	Subjected to the list of prohibited substances of Industrial Safety and Health Act. Please see the original sentences of the related law.		
	Poisonous and Deleterious Substances Control Act	Subjected to the list of specific poisonous substances of Poisonous and Deleterious Substances Control Act. Please see the original sentences of the related law.	information can be checked on JAMP site. Please see the URL below.	
	RoHS (Restriction of Hazardous Substances)	Directive 2011/65/EU and Commission Delegated Directive (EU)2015/863 (RoHS2 Directive) according to the list of substance groups covered by the Directive. Please see the original sentences of the related law.		
EU	ELV (End-of-Life Vehicle)	Subjected to the object substances list of 2000/53/EC (ELV) by EU. Please see the original sentences of the related law.	http://www.ja mp- info.com/list	
	REACH (Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals)	Subjected to the object substances list of REACH by EU. Please see the original sentences of the related law.		



2) Standard of Objectives to be Managed

"Standard of Objectives to be Managed" for chemical substances management, which Sanden requires, is defined depending on the product delivery place and customers' requirement. At every technical meeting with a customer, we clarify "Standard of Objectives to be managed". Please see examples in table 5-2.

Table 5-2 Standard of Objectives to be managed (Examples)

Table 5-2 Standard of	Objectives to be managed (Examples)
Standard of Objectives to be managed	Content of Standard
GADSL	Subjected to the international unified declared substances list, which was deliberated cooperatively by manufacturers of automobile, automobile parts, chemical industry, and so on in Japan, US, and Europe.
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	Subjected to the list of Class I Specified Chemical Substances of Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Please see the original sentences of the related law.
Industrial Safety and Health Act	Subjected to the list of prohibited substances of Industrial Safety and Health Act. Please see the original sentences of the related law.
Poisonous and Deleterious Substances Control Act	Subjected to the list of specific poisonous substances of Poisonous and Deleterious Substances Control Act. Please see the original sentences of the related law.
Product Liability (PL) Law	Subjected to the Product Liability (PL) Law. Please see the original sentences of the related law.
ROHS (Restriction of Hazardous Substances)	Directive 2011/65/EU and Commission Delegated Directive (EU)2015/863 (RoHS2 Directive) according to the list of substance groups covered by the Directive. Please see the original sentences of the related law.
REACH (Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals)	Subjected to the object substances list of REACH by EU. Please see the original sentences of the related law.
CLP (Classification, Labeling and Packaging of substances and mixtures	Subjected to the substance list of carcinogenicity, reproductive toxicity, and mutagen in table 3.1 and 3.2 of Annex VI of CLP by EU. Please see the original sentences of the related law.
POPs (Persistent Organic Pollutants)	Subjected to Annex I of 850-2004-EU (POPs) by EU. Please see the original sentences of the related law.
ESIS PBT European chemical Substances Information System Persistent, Bio accumulative, and Toxic	Subjected to the ESIS PBT list by EU. Please see the original sentences of the related law.
others	Substances specified by Sanden (Refer to the Sanden Group Chemical Substances List)

^{*&}quot;Substances prohibited by laws and ordinance" and "Standard of Objectives to be managed" are subject to change.

^{*}Please check the latest information.



(3) Construction of the environmental management system

All suppliers are requested to perform the following items.

- 1) Existing suppliers and new suppliers.
 - a) Acquisition of "Environmental Management System",
 ISO14001, is requested before start of business
 - b) Reporting the fact of continued certification to Sanden.
- 2) We may check the continuous situation of "Environmental Management System" to confirm whether the activities are continuously carried out.



6. Glossary

(1) IMDS

Abbreviation for "International Material Data System". A system for collecting information on materials and chemical substances contained in automobile components through the supply chain. It is one of the chemical substance management and information collection systems approved by the Japan Automobile Manufacturers Association (JAMA) and is in operation as a standard system in the global automotive industry.

Always obtain IMDS from the source supplier and base your own IMDS on that IMDS.

(2) JAPIA Unified Data Sheet

As a result of the automotive industry's efforts to standardise the survey of environmentally hazardous substances in the automotive industry in order to standardise reporting requirements and harmonise with IMDS, the Japan Auto Parts Industries Association (JAPIA) has approved this form for use in the survey of materials and compounds contained in products to comply with environmental regulations. The forms are certified by the Japan Auto Parts Industries Association (JAPIA).

(3) SDS

Abbreviation for "Safety Data Sheet". A chemical safety data sheet or product safety data sheet. A document prepared and provided to business operators that handle chemical substances so that they can take the necessary measures to protect the environment and health and ensure safety at work. Previously, the expressions MSDS was used, but since 2012, SDS has been used due to a revision of JIS.

(4) JAMP

Abbreviation for Japan Article Management Promotion - consortium. Article Management Promotion - consortium. Based on the recognition that it is essential to improve Japan's industrial competitiveness to create and disseminate a concrete system for the appropriate management of information on chemical substances contained in articles and the smooth disclosure and communication of such information within the supply chain, companies that agree with this philosophy are the initiators of this cross-industry initiative. The companies that agree with this principle have become the initiators and are promoting cross-industry activities.

(5) Chemical Substances Control Law

Law that establishes a system to examine the safety of newly manufactured and imported chemical substances. Designates persistent, highly accumulative and long-term toxic chemical substances such as PCBs as Class 1 Specified Chemical Substances, effectively banning their use.



(6) Safety and Health Law

The Law on Safety and Health was enacted by Cabinet Order on chemical substances that cause serious health hazards to workers in accordance with Article 55 of the Occupational Safety and Health Law. The manufacture, import, transfer, provision or use of these substances is prohibited, except for testing and research.

(7) Poisonous and Deleterious Substances Law

Those listed in Appendix III of the Act and those specified by Cabinet Order in accordance with Appendix III-10 of the Act, based on the Poisonous and Deleterious Substances Control Act. The criteria are determined based on acute toxicity, effects on the skin and eyes, etc., and provisions are made for the manufacture, importation, use, possession and transfer of specified poisons.

(8) Product Liability (PL) Law

In Japan, the Product Liability Law (PL = Product Liability) came into effect in July 1995.

The liability of the manufacturer of a defective product to the victim in the event that the user of the product, a consumer or other third party, suffers physical injury or property damage as a result of the defective product.

Product Liability Requirements

- Manufacturers are obligated to structure their organization appropriately to minimize the risk of product defects.
- From a design/engineering standpoint, products must meet currently valid safety standards and legal regulations.
- The manufacturer is responsible for inaccurate or insufficient operating instructions, information and warnings.
- The manufacturer has a product monitoring obligation that entails the need to take action after the product goes to market.

(9) Revised RoHS Directive

Abbreviation for "Restriction of use of certain Hazardous Substances in electrical and electronic equipment". The European Waste Electrical and Electronic Equipment Directive on the Restriction of Hazardous Substances restricts the use of six substances: lead, potassium, mercury, hexavalent chromium, polybrominated biphenyls, and polybrominated diphenyls in materials and sub-materials used in electrical and electronic equipment produced and sold in Europe.

From July 22, 2019, four new substances, di-2-ethylhexyl phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), and diisobutyl phthalate (DIBP), has been added, making a total of 10 substances subject to regulation. It is known as the revised RoHS Directive.

(10) ELV Directive

Abbreviation for "End of Life Vehicle". End-of-life vehicle = End of Life Vehicle Directive. The European ELV Directive restricts the use of four substances such as lead, potassium, mercury, and hexavalent chromium in all materials and sub-materials used in vehicles produced and sold in Europe.



(11) REACH Regulation

Abbreviation for "Registration, Evaluation, Authorization and restriction of Chemicals". It is a comprehensive regulation on chemical substances in Europe, which requires registration of chemical substances contained in raw materials and sub-materials produced in or imported into Europe. In addition, for products and parts, it is obligatory to disclose information on the content of substances of very high concern (SVHC) specified in the regulation.

(12) CLP Regulation

EU regulation on classification, labeling and packaging of chemicals and mixtures; CLP stands for "Substances and Classification, Labeling and Packaging Regulations". All chemicals in the EU must be classified by EU manufacturers and importers, and if they are classified as "hazardous chemicals", they must be labeled. Foreign companies exporting chemicals into the EU are also required to follow the CLP rules.

(13) POPs

Abbreviation for "Persistent Organic Pollutants". Persistent Organic Pollutants. Chemicals that are highly toxic, persistent, bioaccumulative, and long-range mobile, such as polychlorinated biphenyls (PCBs) and Dichlorodiphenyltrichloroethane (DDT) and dioxins are examples. The United Nations Environment Programme (UNEP) has taken the lead in the international regulation of POPs. The Stockholm Convention on Persistent Organic Pollutants was adopted in May 2001 and issued in May 2004. As of January 2011, Japan and 172 countries (including the European Union) have concluded the treaty.

(14) ESIS PBT

ESIS is the abbreviation for "Europan chemical Substances information System", PBT is for "Persistent, Bioaccumulative, and Toxic". In anticipation of the enforcement of the REACH Regulation, the EU has been promoting the establishment of criteria for PBT and vPvB (very Persistent and very Bioaccumulative) since around 2001, and the evaluation of applicable substances based on these criteria. Based on this project, substances judged by the EU to fall under PBT, vPvB, etc. are published as the PBT list in ESIS. These substances are positioned as one of the populations for selecting candidate substances for authorization under the REACH regulation.

(15) chemSHERPA.

chemSHERPA refers to a common scheme for information communication (and data preparation support tool) developed and released in 2015 at the initiative of the Ministry of Economy, Trade and Industry (METI) to ensure that information on chemical substances contained in products is properly managed and reliably and efficiently communicated throughout the supply chain from upstream companies to downstream companies. It is currently operated by JAMP (Joint Article Management Promotion Council) and is regularly reviewed and upgraded in conjunction with revisions to relevant laws and regulations.