

Chapter 1 General Principles

Article 1

These Regulations are stipulated pursuant to Article 30, paragraph 5 of the Toxic and Concerned Chemical Substances Control Act (hereinafter “this Act”).

Article 2

The term “registrant” as used herein means a natural person, a juristic person, an unincorporated body having a representative or manager, an administrative authority, or a body, who may be the subject of rights and obligations under other laws, that is subject to chemical substances registration pursuant to Article 30 of this Act.

A registrant may appoint a representative to process the application and/or reporting affairs covered in the Regulations. The representative should be a natural person possessing the nationality of the Republic of China, or a juristic person, an institute or an organization that is constituted or registered by law.

When applying for chemical substances registration according to the Regulations, a registrant shall attach a copy of a National Identification Card, a copy of company registration, business registration, factory registration, or other documents verifying the registrant’s establishment. A representative shall provide a notarized or certified appointment letter.

Article 3

The terms used in the Regulations are defined as follows:

- I. “Chemical Substance” refers to a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additives necessary to preserve its stability and any unintended constituents deriving from the processes used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.
- II. “Substance which Occurs in Nature” refers to a naturally occurring substance as such, unprocessed or processed only by manual, gravitational or mechanical means, by dissolution in water, by extraction with water, by steam distillation, by flotation or by heating solely to remove water, or which is extracted from air by any means without any chemical changes, or a large molecule from living organisms or a natural polymer obtained without chemical processing.
- III. “Mixture” refers to a mix or solution composed of two or more substances which do not react.
- IV. “Article” refers to an object which during production is given a specific shape or design.
- V. “Polymer” refers to a chemical substance that fits the following criteria:
 - A. A macro-molecular chemical substance consisting of molecules characterized by the sequence of one or more types of monomer units
 - B. A molecule containing at least three monomer units that are covalently bound to at least one other monomer unit; such molecules account for over 50% of the weight of that substance, and the

amount of the said molecules presenting the same molecular weight must be less than 50% of the weight of that substance. A molecule containing at least three monomer units that are covalently bound to at least one other monomer unit; such molecules account for over 50% of the weight of that substance, and the amount of the said molecules presenting the same molecular weight must be less than 50% of the weight of that substance

- C. Differences in the molecular weight are primarily attributable to differences in the number of monomer units
- VI. “Polymer for which the 2% Rule is applicable” refers to monomers or reactants of polymer that are not regarded as part of the polymer when the weight percentage of the monomers or reactants is less than 2%; if the naming of the polymer is a monomer-based representation, it may or may not include monomers and other reactants used at less than 2% weight. A monomer-based representation means the naming of polymer is based on constituent monomers.
- VII. “Polymer of Low Concern” (PLC) refers to a chemical substance that is evaluated by the central competent authority, and fulfills any one of the following conditions:
- A. Polymer with an average molecular weight in a range of 1,000 to 10,000 Daltons, containing oligomers of molecular weights below 500 Daltons in an amount less than 10% and oligomers of molecular weights below 1,000 Daltons in an amount less than 25%
 - B. Polymer with an average molecular weight over 10,000 Daltons, containing oligomers of molecular weights below 500 Daltons in an amount less than 2% and oligomers of molecular weights below 1,000 Daltons in an amount less than 5%
 - C. Polyester
 - D. Insoluble polymer
- VIII. “Intermediate” refers to a chemical substance produced and consumed in the course of the manufacturing process of another chemical substance.
- IX. “On-site Isolated Intermediate” refers to an intermediate that is produced and consumed on the same site.
- X. “Incidental Reaction Product” refers to a chemical substance resulting from a chemical reaction induced by any change in environmental condition during the use and the storage of the original chemical substance.
- XI. “Impurity” refers to an unintended constituent present in a substance as manufactured. It originates from the starting materials or is the result of secondary or incomplete reactions during the production process. While it is present in the final substance, it was not intentionally added, nor does it enhance the commercial value of that substance. An individual impurity shall be no more than 10% (w/w) of the final substance. The total of all impurities present shall be no more than 20% (w/w) of the substance.
- XII. “Scientific Research and Development” (SRD) refers to any scientific experimentation, education, analysis, or chemical research carried out under strictly controlled conditions for scientific or academic research.

- XIII. “Product and Process Orientated Research and Development” (PPORD) refers to any scientific development related to product development or the further development of a substance, in the course of which pilot plants or production trials are used to develop the production process or to test the fields of application of the substance.
- XIV. “Substance of Carcinogenic, Mutagenic or Toxic for Reproduction” (CMR) refers to a substance that is classified as carcinogenicity category 1, mutagenicity category 1, or reproductive toxicity category 1, based on the R.O.C. National Standards (CNS) 15030.
- XV. “Chemical Substance under Customs Supervision” refers to a chemical substance under customs supervision, which is temporarily stored or placed in a harbor’s designated area, warehouse, container freight station, bonded warehouse, logistics center, or free trade zone, with a provision for re-exportation or transit.

Article 4

The Regulations shall not apply to any of the following substances or articles:

- I. Substances which occur in nature
- II. Chemical substances in machines or equipment for test run purposes
- III. Inseparable intermediates from chemical reactions in the reaction vessel or production process
- IV. Chemical substances for national security or national defense purposes
- V. Chemical substances under customs supervision
- VI. Chemical waste produced or released from industrial processes
- VII. Incidental reaction products or impurities that are of no commercial application
- VIII. Mixtures, but individual constituents of mixtures shall not be applied to this Article
- IX. Articles
- X. Polymer to which the 2% Rule is Applicable and is listed on the inventory of existing chemical substances

The Regulations shall not apply to the substances or objects regulated under the following Acts promulgated by the government authorities:

- I. Agro-pesticides, as defined by the Agro-pesticides Management Act
- II. Feeds and feed additives, as defined by the Feed Control Act
- III. Fertilizers, as defined by the Fertilizer Management Act
- IV. Veterinary drugs, as defined by the Veterinary Drugs Control Act
- V. Medicaments, as defined by the Pharmaceutical Affairs Act
- VI. Controlled drugs, as defined by the Controlled Drugs Act
- VII. Cosmetics, as defined by the Cosmetic Hygiene and Safety Act
- VIII. Foods, food additives, food utensils, food containers or packaging, and food cleansers, as defined by the Act Governing Food Safety and Sanitation
- IX. Tobacco products, as defined by the Tobacco Hazards Prevention Act

- X. Tobacco and alcohol, as defined by the Tobacco and Alcohol Administration Act
 - XI. Radioactive materials, as defined by the Atomic Energy Act and the Ionizing Radiation Protection Act
 - XII. Industrial-use explosive materials, as defined by the Industrial Explosives Administrative Act
 - XIII. Controlled chemicals as prescribed in the Occupational Safety and Health Act
 - XIV. Chemical substances regulated by the Montreal Protocol under the Air Pollution Control Act
 - XV. Environmental agents, as defined by the Environmental Agents Control Act
 - XVI. Toxic and concerned chemical substances, as defined by this Act
- For a chemical substance manufactured or imported as a raw material in the preceding paragraph, the chemical substance shall be subject to the provisions of the Regulations.

Chapter 2 New Chemical Substances Registration

Article 5

To apply for new chemical substances registration approval, manufacturers or importers shall refer to the following registration types based on estimated annual manufactured or imported quantity:

- I. Standard registration: at 1 ton or more
- II. Simplified registration: at 100 kilograms or more, but less than 1 ton
- III. Small quantity registration: less than 100 kilograms

If the uses or properties of a new chemical substance to be manufactured or imported meets any of the following circumstances, its registration type shall be selected by referring to the estimated annual manufactured or imported quantity, as specified in Appendix 1.

- I. A substance used for the purpose of SRD
- II. A substance used for the purpose of PPORD
- III. An On-site Isolated Intermediate
- IV. Polymer
- V. Prior verified Polymer of Low Concern, PLC

Article 6

The quantity thresholds for standard registration are as specified in Appendix 2.

The registration information items of each registration type are specified as follows:

- I. Standard registration: as specified in Appendixes 3 and 4
- II. Simplified registration: as specified in Appendix 5
- III. Small quantity registration: as specified in Appendix 6

Article 7

For a manufactured or imported new chemical substance undergoing application for simplified registration or small quantity registration pursuant to the previous two Articles, the central competent authority may demand the registrant to register data in accordance with the

requirements of standard registration if the new chemical substance is identified as a substance of CMR.

Article 8

For a new chemical substance meeting the circumstances of being a substance used for the purposes of scientific research and development; or for product and process oriented research and development; or having other special forms, in addition to registering the new chemical substance in accordance with the required information items of the Regulations, the registrant shall submit the following documents to the central competent authority:

- I. Registration form for SRD and PPORD
- II. Nanoscale chemical substances registration form

Article 9

Upon reviewing new chemical substances information submitted by a registrant, the central competent authority shall approve the registration along with an additional clause to prohibit or restrict handling, and shall require registrants to regularly report handling conditions, update registration report data, or submit chemical substances hazard information, if the central competent authority determines that there is a concern over the toxicological characteristics of a new chemical substance conforming to the definitions of Class 1, Class 2, or Class 3 toxic chemical substances.

Upon reviewing new chemical substances information submitted by a registrant, the central competent authority shall approve the registration along with an additional clause to restrict handling, and shall require registrants to submit information on exposure assessment and risk assessment, update registration report data, or submit chemical substances hazard information, if the central competent authority determines that there is a concern of environmental pollution or any threat to human health.

Article 10

When different registrants apply to register the same new chemical substance jointly or sequentially, they may use common data needed for the registration through consultation.

The new chemical substance, subjected to the joint registration pursuant to the preceding paragraph, is to be registered according to the Regulations, for which the overall quantity of the joint registration shall be the sum of the individual quantities from each co-registrant.

By taking into account the overall manufactured or imported quantity of the new chemical substances registered and approved, the central competent authority may require registrants to apply for the new registration under the designated registration type, or to apply for the joint registration.

For a joint registration that is agreed upon by co-registrants, but for which no agreement has been reached on the cost sharing of the registration data, the central competent authority may determine an average apportionment at the request of the application's registrants. The registration data can

be used after the registrants have paid their respective shares of expenses according to the decision made by the central competent authority.

Article 11

The central competent authority issues the registration number for a new chemical substance that is registered and approved.

Article 12

The valid period of the new chemical substances registration approval is 5 years.

Upon agreements for the joint registration for early and late registrants, the valid periods of such joint registration for the late registrants shall be consistent with those periods for the early registrants.

Article 13

A registrant, to extend the valid period of the registration approval, shall make an application to the central competent authority three to six months prior to its expiration. Information on estimated quantity of new chemical substances manufactured or imported for the following year shall be submitted to the central competent authority at the same time. Upon approval of the central competent authority, the extension shall be granted pursuant to the previous Article.

If the central competent authority is unable to make the rejection/approval decision for the extensions before the original approval registration expires, those who file the extension application pursuant to the preceding paragraph may continue to manufacture or import the new chemical substances, in compliance with the situation specified in the originally approved registration, until the review is completed.

If the central competent authority is unable to make the rejection/approval decision for the extensions before the original approval registration expires, those who fail to file the extension application pursuant to Paragraph 1 shall stop manufacturing or importing the new chemical substances after the valid period of the original approved registration expires. If a registrant does not apply for an extension before the valid period expires, the original approved registration is revoked exactly on the following day of the expiration day specified with the original approved registration. A new application of registration shall be made in order to continue manufacturing or importing such chemical substances.

If the registration type intended for extension is inconsistent with the originally approved registration, a new application for registration shall be made.

Article 14

A new chemical substance registered and approved under any one of following circumstances may be included in the inventory of existing chemical substances by the central competent authority:

- I. It shall be at least five years after the standard registration is filed and completed
- II. It shall be at least five years after the PLC registration process is filed and completed in accordance with the small quantity registration

III. Toxic chemical substances announced by the central competent authority

A registrant may apply for inclusion in the inventory of existing chemical substances, when a new chemical substance has been registered and approved for any of the following registrations:

I. Standard registration filed and completed through submission of information on hazard assessment and exposure assessment

II. PLC registration in accordance with the small quantity registration

A new chemical substance registered and approved, which has been included in the inventory of existing chemical substances pursuant to the provisions of the preceding two paragraphs, is subject to the related rules of registered and approved existing chemical substances.

Chapter 3 Existing Chemical Substances Registration

Article 15

For an existing chemical substance first manufactured or imported in annual quantity of 100 kilograms or more, a registrant shall, within 6 months from the date of occurrence of the fact, apply for the phase 1 registration and attach chemical information, as specified in Appendix 7. No existing chemical substance shall be manufactured or imported, unless the registration approval is obtained within the specified period.

The central competent authority is to issue a phase 1 registration number to a registrant whose registration application is approved, pursuant to the preceding paragraph.

Registration for existing chemical substances, manufactured or imported in annual quantity less than 100 kilograms, may be made in accordance with Article 15, paragraph 1. After the registration application is approved, the abovementioned existing chemical substances are subject to the Regulations.

Article 16

The central competent authority may, by stages, designate the lists of existing chemical substances subject to standard registration, including the names of the chemical substances, quantity thresholds and deadlines for registration, based on the circumstances of the phase 1 registration of existing chemical substances.

The quantity thresholds subject to the standard registration of existing chemical substances by stage as designated pursuant to the previous paragraph are specified in Appendix 8, whereas the designated lists and deadlines are specified in Appendix 9.

Registrants manufacturing or importing any existing chemical substances listed in Appendix 9, shall apply for the standard registration of such existing chemical substances and attach information, as specified in Appendixes 3 and 4.

On-site isolated intermediates may be exempted from needing an application for the standard registration of existing chemical substances pursuant to the provisions of the preceding three paragraphs.

Registrants manufacturing or importing existing chemical substances, which are not any of the chemical substances listed in Appendix 9 or do not meet the quantity thresholds in Appendix 8, may apply for the registration of chemical substances pursuant to Article 16, paragraph 3.

Article 17

When different registrants, pursuant to Article 16, paragraphs 2 or 5, apply to register the same existing chemical substance jointly or sequentially, they may use common data needed for registration through consultation.

The existing chemical substance, subjected to the joint registration pursuant to the preceding paragraph, is to be registered according to Article 16, paragraph 3.

For a joint registration that is agreed upon by co-registrants, but for which no agreement has been reached on the cost sharing of the registration data, the central competent authority may determine an average apportionment at the request of the application's registrants. The registration data can be used after the share of expenses has been paid.

Article 18

The central competent authority issues a completion number for the standard registration of an existing chemical substance to those who apply and complete information registration specified in Appendix 3 pursuant to the provisions of the previous two Articles.

Upon acquisition of the completion number as described in the previous paragraph, the registrant shall complete information registration specified in Appendix 4 proactively or before the due date appointed by the central competent authority.

Chapter 4 Information Dissemination and Protection of Business Secrets

Article 19

Chemical substances information registered and approved by the central competent authority shall be disseminated to the public. The information items which shall be disseminated are as follows:

- I. Registrant information
- II. Chemical substance names
- III. Manufacture or import conditions
- IV. Classification and labelling
- V. Guidance on safe use
- VI. Physical and chemical properties
- VII. Toxicological and ecotoxicological information
- VIII. Hazard assessment
- IX. Exposure assessment

The content pursuant to the previous paragraph shall be publicly disseminated through the Internet by the central competent authority.

Article 20

Chemical substances information that is registered, which involves confidential matters on national defense or business secrets, shall be kept confidential.

The aforementioned business secrets shall conform to the following conditions:

- I. It is not known to persons generally involved with information of this type
- II. It has actual or potential economic value due to its secretive nature
- III. Its owner has taken reasonable measures to maintain its confidentiality

For registered information determined to be business secrets pursuant to Article 20, paragraph 1, the following shall be protected and kept confidential:

- I. Registrant information
- II. Substance identification
- III. Information on manufacturing and importing
- IV. Life cycle description

A registrant may apply for confidential information protection with proof documents conforming to Article 20, paragraph 2, in any of the following occasions:

- I. Application for the registration of a new chemical substance
- II. Application for the phase 1 registration of an existing chemical substance
- III. Application for the standard registration of an existing chemical substance
- IV. Application for the inclusion in the inventory of existing chemical substances pursuant to Article 14

A registrant, who does not apply for confidential information protection for a chemical substance registered and approved pursuant to the previous paragraph, may state the reasons, with proof documents conforming to Article 20, paragraph 2, and apply to the central competent authority for information protection, at the time of filing an extension application for a registered new chemical substance or after the registration is approved for an existing chemical substance.

Article 21

The confidential period of the chemical substance information approved by the central competent authority is 5 years.

Except for the existing chemical substances, the confidential period pursuant to Article 20, paragraph 5 expires as the valid period for the corresponding registration expires.

A registrant may apply for the extension of the confidential periods specified in Article 21, paragraph 1 three to six months prior to the expiry of the confidential period.

The maximum confidential period for a new chemical substance is 15 years; for an existing chemical substance, the maximum confidential period is 10 years. For a new chemical substance that has been included in the inventory of existing chemical substances, the maximum confidential period is 15 years.

Article 22

The central competent authority shall notify the registrant when chemical substances information is publicly disseminated in accordance with Article 69, paragraph 2 of this Act.

Chapter 5 Supplementary Provisions

Article 23

The central competent authority may provide the information of the registered new and existing chemical substances to the industry competent authorities to manage chemical substances used in the subject industry.

A registrant selling or transferring new or existing chemical substances shall provide the information on safe use and other identifiable labels as permitted under the Registrations.

Article 24

For registered new and existing chemical substances, the registrant shall, starting from the following year after the registration is approved, submit a report annually on the manufactured or imported quantity in the previous year for the new or the existing chemical substances, in accordance with Appendix 10 between April 1 and September 30.

Where the information reported by the registrant does not comply with the relevant regulations as determined by the competent authority, the competent authority shall notify the registrant to make a correction within a prescribed period. Where the registrant fails to do so or the correction fails to meet the requirements, the competent authority shall impose an administrative penalty in accordance with Article 56, paragraph 4 of this Act and notify the registrant to make another correction within a prescribed period. If the registrant fails to do so or the made correction fails to meet the requirements again, an administrative penalty shall be imposed for each violation.

The report and correction, pursuant to the previous two paragraphs, shall be submitted via the Internet transmission system designated by the central competent authority. However, a report or correction in writing may be submitted with the consent of the central competent authority.

Article 25

The review periods of all the applications accepted by the central competent authority in the Regulations are as follows:

- I. New chemical substances small quantity registration, PLC prior verification, PLC small quantity registration, existing chemical substances phase 1 registration, confidential business information protection and corresponding extension: 10 working days from the date of receipt of the application
- II. New chemical substances simplified registration and the inclusion in the inventory of existing chemical substances: 20 working days from the date of receipt of the application
- III. New chemical substances standard registration: 60 working days from the date of receipt of the application
- IV. Existing chemical substances standard registration: 90 working days from the date of receipt of the application

The review periods for small quantity registration and simplified registration may be extended to 60 working days when the registration applications satisfy the conditions in Article 9.

The central competent authority shall notify the registrant if the review period of the previous two paragraphs is extended. The number of extensions is limited to one.

Article 26

The central competent authority shall review application documents for all applications accepted under the Regulations. Should the review procedure find documents inadequate, mistaken, or unspecific, the central competent authority shall require the registrant to provide a correction within 30 working days from the date of receiving the notification from the central competent authority. The said notification of corrections shall be given only three times. However, if the failure to provide supplementation or correction within this limited period is caused by scientific or technical factors, this requirement shall not apply to registrants who report to the central competent authority and obtain its consent.

The review periods and the number of extensions of review periods, pursuant to any of the subparagraphs in the previous Article, shall be calculated anew from the date that the central competent authority receives the correction submitted by the registrant pursuant to the previous paragraph.

The application shall be rejected if the registrant fails to make the correction within the limited time, or fails to make the correction within a given period more than three times.

Article 27

A registrant shall apply for changes to the registered information for chemical substances proactively or within 30 working days from the date of receiving the notification from the central competent authority.

If the change pursuant to the previous paragraph involves basic information related to a registrant, an application for change shall be made within 30 working days from receiving approval for change of company registration, business registration, factory registration, as well as other documentary proof issued by the industry competent authorities. An application for change of a designated responsible person shall be made within 60 working days after the change in the designated responsible person.

If the registration type for which a change is applied differs from the original registration type that has been approved, a new registration application shall be submitted.

Under any of the following circumstances, the registrant may file an application to the central competent authority for a revocation of an approval registration and a cancellation of the corresponding registration number:

- I. A new registration has been submitted and approved pursuant to the preceding paragraph
- II. A chemical substance with registration approval is no longer being manufactured or imported

Article 28

If registrants who obtained chemical substances registration approval are found with any of the following circumstances, the central competent authority may withdraw or revoke approval of the registration, and cancel their registration numbers:

- I. False registration information
- II. Obtaining approval of chemical substances registration by fraud, coercion, or other improper means
- III. Manufacturing or importing chemical substances by using or forging registration numbers that belong to others
- IV. Improper use of chemical substances reported by the industry competent authorities
- V. Documentary proof of company registration, business registration, factory registration, or other equivalent permission of business establishment that has been ordered a dissolution, withdrawn, or revoked by the industry competent authorities
- VI. Dissolution or termination of business

Article 29

For chemical substances registered and approved with any of the following circumstances, the registrant shall provide supplementary information proactively or as prescribed by the central competent authority by an appointed due date:

- I. New scientific evidence on chemical substances
- II. New information on the uses of chemical substances
- III. New information on toxicology and ecotoxicology of chemical substances
- IV. New information on hazard assessment or exposure assessment of chemical substances
- V. Other information designated by the central competent authority

Article 30

If a registrant has any concerns regarding the result of registration review, written appeal with stated reasons may be submitted within 30 working days from receiving the notice of the review result.

The number of appeals pursuant to the previous paragraph shall be only one.

Article 31

Registrants submitting all of the application pursuant to the Regulations shall pay a corresponding fee according to the fee-charging standards set for this Act; the registrant shall submit the chemical substances information through Internet transmission systems designated by the central competent authority.

The information as prescribed in previous paragraphs shall be written in Chinese. All foreign materials shall have a Chinese edition attached.

The central competent authority shall not accept any application if registrants fail to process their registration pursuant to the previous two paragraphs. However, this requirement shall not apply to registrants who report to the central competent authority and obtain its consent.

Article 32

The Regulations take force upon the date of promulgation.

Draft Amendments to the Appendixes of Regulations for New and Existing Chemical Substances
Registration

Appendix 1

Registration Types for New Chemical Substances by Estimated Annual Manufactured or Imported Quantity and Uses or Properties

| Annual Manufactured or Imported Quantity \ Uses or Properties | For Scientific Research and Development, SRD | For Product and Process Orientated Research and Development, PPORD | On-site Isolated Intermediates | Polymer | Polymer of Low Concern, PLC (Prior Verification required) |
|---|--|--|--------------------------------|-----------------------------|---|
| Less than 1 ton | Exemption | Small Quantity Registration | Small Quantity Registration | Small Quantity Registration | Exemption |
| 1 ton or more, but less than 10 tons | Simplified Registration | Simplified Registration | Simplified Registration | Simplified Registration | Small Quantity Registration |
| 10 tons or more | Standard Registration | Standard Registration | Standard Registration | Standard Registration | Small Quantity Registration |

Note: Academic organizations are not required to submit documentation to the central competent authority for record and reference, if the new chemical substance is less than 1 ton and is used for scientific research and development. However, as a chemical used in business premises, for the purpose of research and development, (including for research, analysis, sampling, or testing, etc.), submission of documentation to the central competent authority must be made for record and reference.

Appendix 2

Quantity Thresholds for New Chemical Substances Subject to Standard Registration

| Annual Manufactured or Imported Quantity | Substances of Carcinogenic, Mutagenic or Toxic for Reproduction (CMR) | On-site Isolated Intermediates, Polymer, for Scientific Research and Development (SRD), or for Product and Process Orientated Research and Development (PPORD) | Other Chemical Substances |
|--|---|--|---------------------------|
| Less than 1 ton | Level 1 | - | - |
| 1 ton or more, but less than 10 tons | Level 2 | - | Level 1 |
| 10 tons or more, but less than 100 tons | Level 3 | Level 1 | Level 2 |
| 100 tons or more, but less than 1,000 tons | Level 4 | Level 1 | Level 3 |

| | | | |
|--------------------|---------|---------|---------|
| 1,000 tons or more | Level 4 | Level 1 | Level 4 |
|--------------------|---------|---------|---------|

Notes:

1. For 10 metric tons or more of a new chemical substance which meets the definition of being a CMR substance and concurrently meets the definition of on-site isolated intermediates, polymer, and substances for SRD or PPORD, the quantity threshold thereof shall be considered that for CMR substances.
2. According to Article 29, after registration applications have been approved, the registrants should proactively provide the supplemental information based on the new quantity threshold when the actual manufactured or imported quantity increases which leads to an increase in the quantity threshold.

Appendix 3

Information Items, Regarding Registrants and Substances, of New and Existing Chemical Substances Subject to Standard Registration

| Sections | Items | Level 1 | Level 2 | Level 3 | Level 4 |
|-------------------------------------|--|---------|---------|---------|---------|
| 1. General Information | 1.1 Registrant information | V | V | V | V |
| | 1.2 Substance identification | V | V | V | V |
| 2. Manufacture, Use and Exposure | 2.1 Information on manufacturing and importing | V | V | V | V |
| | 2.2 Life cycle description | V | V | V | V |
| | 2.3 Exposure information | V | V | V | V |
| 3. Classification and Labelling | 3.1 Physical hazards | V | V | V | V |
| | 3.2 Health hazards | V | V | V | V |
| | 3.3 Environmental hazards | V | V | V | V |
| | 3.4 Labelling elements | V | V | V | V |
| 4. Guidance on Safe Use | 4.1 First-aid measures | V | V | V | V |
| | 4.2 Fire-fighting measures | V | V | V | V |
| | 4.3 Accidental release measures | V | V | V | V |
| | 4.4 Handling and storage | V | V | V | V |
| | 4.5 Transport information | V | V | V | V |
| | 4.6 Exposure controls/personal protection | V | V | V | V |
| | 4.7 Stability and reactivity | V | V | V | V |
| | 4.8 Disposal considerations | V | V | V | V |
| 5. Physical and Chemical Properties | 5.1 State of the substance | V | V | V | V |
| | 5.2 Melting point/Freezing point | V | V | V | V |
| | 5.3 Boiling point | V | V | V | V |
| | 5.4 Density | V | V | V | V |

| | | | | | |
|---------------------------------|---|---|---|---|---|
| | 5.5 Partition coefficient: n-octanol/water | V | V | V | V |
| | 5.6 Water solubility | V | V | V | V |
| | 5.7 Vapor pressure | V | V | V | V |
| | 5.8 Flash point | V | V | V | V |
| | 5.9 Flammability | V | V | V | V |
| | 5.10 Explosive properties | V | V | V | V |
| | 5.11 Oxidizing properties | V | V | V | V |
| | 5.12 pH | V | V | V | V |
| | 5.13 Auto-ignition temperature | V | V | V | V |
| | 5.14 Viscosity | | | V | V |
| | 5.15 Corrosive to metals | | | V | V |
| 6. Toxicological Information | 6.1 Acute toxicity by oral, dermal, or inhalation route | V | V | V | V |
| | 6.2 Skin irritation/corrosion | V | V | V | V |
| | 6.3 Serious eye damage/irritation | V | V | V | V |
| | 6.4 Skin sensitization | V | V | V | V |
| | 6.5 Genotoxicity | V | V | V | V |
| | 6.6 Basic toxicokinetics | | V | V | V |
| | 6.7 Repeated dose toxicity by oral, dermal, or inhalation route | | V | V | V |
| | 6.8 Reproductive/developmental toxicity | | V | V | V |
| | 6.9 Carcinogenicity | | | | V |
| 7. Ecotoxicological Information | 7.1 Short-term toxicity to aquatic invertebrates | V | V | V | V |
| | 7.2 Toxicity to aquatic algae and cyanobacteria | V | V | V | V |
| | 7.3 Biodegradation in water: screening tests | V | V | V | V |
| | 7.4 Short-term toxicity to fish | | V | V | V |
| | 7.5 Hydrolysis | | V | V | V |
| | 7.6 Toxicity to microorganisms | | V | V | V |
| | 7.7 Adsorption/desorption | | V | V | V |
| | 7.8 Long-term toxicity to aquatic invertebrates | | | V | V |
| | 7.9 Long-term toxicity to fish | | | V | V |
| | 7.10 Toxicity to soil macroorganisms except arthropods | | | | V |
| | 7.11 Toxicity to terrestrial plants | | | | V |
| | 7.12 Toxicity to soil microorganisms | | | | V |
| | 7.13 Biodegradation in water and sediment: simulation tests | | | | V |

| | | | | | |
|--|--|--|--|--|---|
| | 7.14 Biodegradation in soil | | | | V |
| | 7.15 Bioaccumulation: aquatic/sediment | | | | V |
| | 7.16 Sediment toxicity | | | | V |

Note: In each level of the standard registration, items marked with “V” should be submitted.

Appendix 4

Information Items, Regarding Hazard and Exposure Assessment, of New and Existing Chemical Substances Subject to Standard Registration

| Sections | Items | Level 1 | Level 2 | Level 3 | Level 4 |
|------------------------|--|---------|---------|---------|---------|
| 1. Hazard Assessment | 1.1 Human health hazard assessment of physicochemical properties | | V | V | V |
| | 1.2 Human health hazard assessment | | V | V | V |
| | 1.3 Environmental hazard assessment | | V | V | V |
| | 1.4 PBT (persistent, bioaccumulative and toxic) and vPvB (very persistent and very bioaccumulative) assessment | | V | V | V |
| 2. Exposure Assessment | 2.1 Exposure scenario(s) | | V | V | V |
| | 2.2 Exposure estimation | | V | V | V |
| | 2.3 Risk characterization | | V | V | V |

Note:

- In each level of the standard registration, items marked with “V” should be submitted.
- Chemical substances annually manufactured or imported in quantity of 10 tons or more which do not meet any of following conditions, may be exempted from submission of exposure assessment:
 - Physicochemical properties hazardous to human health
 - Health hazard
 - Environmental hazard
 - Being persistent, bioaccumulative and toxic (PBT)
 - Being very persistent and very bioaccumulative (vPvB)

Appendix 5

Information Items of New Chemical Substances Subject to Simplified Registration

| Sections | Items |
|----------------------------------|--|
| 1. General information | 1.1 Registrant information |
| | 1.2 Substance identification |
| 2. Manufacture, Use and Exposure | 2.1 Information on manufacturing and importing |
| | 2.2 Life cycle description |
| | 2.3 Exposure information |

| | |
|-------------------------------------|--|
| 3. Classification and Labelling | 3.1 Physical hazards 3.2 Health hazards 3.3 Environmental hazards 3.4 Labelling elements |
| 4. Guidance on Safe Use | 4.1 First-aid measures 4.2 Fire-fighting measures 4.3 Accidental release measures 4.4 Handling and storage 4.5 Transport information 4.6 Exposure controls/personal protection 4.7 Stability and reactivity 4.8 Disposal considerations |
| 5. Physical and Chemical Properties | 5.1 State of the substance 5.2 Melting point/Freezing point 5.3 Boiling point 5.4 Density 5.5 Partition coefficient: n-octanol/water 5.6 Water solubility |

Appendix 6

Information Items of New Chemical Substances Subject to Small Quantity Registration

| Sections | Items |
|------------------------|--|
| 1. General information | 1.1 Registrant information 1.2 Substance identification |
| 2. Manufacture and Use | 2.1 Information on manufacturing and importing 2.2 Life cycle description |

Appendix 7

Information Items of Existing Chemical Substances Subject to Phase 1 Registration

| Sections | Items |
|------------------------|---|
| 1. General information | 1.1 Registrant information 1.2 Chemical Abstracts Service (CAS) Registry Number or serial number |
| 2. Manufacture and Use | 2.1 Manufactured and imported quantity 2.2 Life cycle description |

Note: A serial number shall refer to a code assigned for an existing chemical substance listed in the national inventory of existing chemical substances established by the Ministry of Labor, where information

confidentiality request has been approved, or the chemical substance has no CAS Registry Number.

Appendix 8

Quantity Thresholds for Existing Chemical Substances Subject to Standard Registration

| Annual Manufactured or Imported Quantity | Substances of Carcinogenic, Mutagenic or Toxic for Reproduction (CMR) | Other Chemical Substances |
|--|---|---------------------------|
| 1 ton or more, but less than 10 tons | Level 2 | Level 1 |
| 10 tons or more, but less than 100 tons | Level 3 | Level 2 |
| 100 tons or more, but less than 1,000 tons | Level 4 | Level 3 |
| 1,000 tons or more | Level 4 | Level 4 |

Note: According to Article 29, after the standard registration has been completed, the registrants should proactively provide the supplemental information based on the new quantity threshold when the actual manufactured or imported quantity increases which leads to an increase in the quantity threshold.

Appendix 9

Designated List of Existing Chemical Substances Subject to Standard Registration and Deadlines for Standard Registration

| Stage | Serial No. | CAS Registry No. | Name |
|-------|------------|------------------|---|
| 1 | 1 | 79-10-7 | Acrylic acid |
| 1 | 2 | 10043-01-3 | Aluminium sulfate |
| 1 | 3 | 7664-41-7 | Ammonia, anhydrous |
| 1 | 4 | 1336-21-6 | Ammonium hydroxide |
| 1 | 5 | 123-77-3 | 1,1'-Azobis(formamide) |
| 1 | 6 | 100-52-7 | Benzaldehyde |
| 1 | 7 | 552-30-7 | Benzene-1,2,4-tricarboxylic acid 1,2-anhydride |
| 1 | 8 | 119-61-9 | Benzophenone |
| 1 | 9 | 25973-55-1 | 2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol |
| 1 | 10 | 90-43-7 | 2-Biphenylol |
| 1 | 11 | 103-23-1 | Bis(2-ethylhexyl) adipate |
| 1 | 12 | 106-94-5 | 1-Bromopropane |
| 1 | 13 | 111-76-2 | 2-Butoxyethanol |
| 1 | 14 | 25013-16-5 | Butylated hydroxyanisole |
| 1 | 15 | 128-37-0 | Butylated hydroxytoluene |
| 1 | 16 | 57693-14-8 | C.I. Acid black 172 |

| | | | |
|---|----|------------|---|
| 1 | 17 | 105-60-2 | ϵ -Caprolactam |
| 1 | 18 | 1333-86-4 | Carbon black |
| 1 | 19 | 95-48-7 | o-Cresol |
| 1 | 20 | 108-77-0 | Cyanuric chloride |
| 1 | 21 | 108-94-1 | Cyclohexanone |
| 1 | 22 | 95-33-0 | N-Cyclohexyl-2-benzothiazolesulfenamide |
| 1 | 23 | 108-91-8 | Cyclohexylamine |
| 1 | 24 | 1309-64-4 | Diantimony trioxide |
| 1 | 25 | 1303-86-2 | Diboron trioxide |
| 1 | 26 | 80-43-3 | Dicumyl peroxide |
| 1 | 27 | 7173-51-5 | Didecyldimethylammonium chloride |
| 1 | 28 | 127-19-5 | N,N-Dimethylacetamide |
| 1 | 29 | 80-15-9 | α,α -Dimethylbenzyl hydroperoxide |
| 1 | 30 | 793-24-8 | N-1,3-Dimethylbutyl-n'-phenyl-1,4-phenylenediamine |
| 1 | 31 | 64742-54-7 | Distillates (petroleum), hydrotreated heavy paraffinic |
| 1 | 32 | 64742-55-8 | Distillates (petroleum), hydrotreated light paraffinic |
| 1 | 33 | 64742-65-0 | Distillates (petroleum), solvent-dewaxed heavy paraffinic |
| 1 | 34 | 96-76-4 | 2,4-Di-tert-butylphenol |
| 1 | 35 | 75-56-9 | 1,2-Epoxypropane |
| 1 | 36 | 106-91-2 | 2,3-Epoxypropyl methacrylate |
| 1 | 37 | 141-43-5 | Ethanolamine |
| 1 | 38 | 111-15-9 | 2-Ethoxyethyl acetate |
| 1 | 39 | 140-88-5 | Ethyl acrylate |
| 1 | 40 | 2687-91-4 | 1-Ethyl-2-pyrrolidinone |
| 1 | 41 | 107-21-1 | Ethylene glycol |
| 1 | 42 | 107-15-3 | Ethylenediamine |
| 1 | 43 | 149-57-5 | 2-Ethylhexanoic acid |
| 1 | 44 | 15571-58-1 | 2-Ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate |
| 1 | 45 | 110-00-9 | Furan |
| 1 | 46 | 98-00-0 | Furfuryl alcohol |
| 1 | 47 | 107-22-2 | Glyoxal |
| 1 | 48 | 142-82-5 | Heptane |
| 1 | 49 | 100-97-0 | Hexamethylenetetramine |
| 1 | 50 | 110-54-3 | Hexane |
| 1 | 51 | 10035-10-6 | Hydrogen bromide |
| 1 | 52 | 7722-84-1 | Hydrogen peroxide |
| 1 | 53 | 99-96-7 | 4-Hydroxybenzoic acid |
| 1 | 54 | 5873-54-1 | 1-Isocyanato-2-(4-isocyanatobenzyl)benzene |
| 1 | 55 | 4098-71-9 | 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate |
| 1 | 56 | 9016-87-9 | Isocyanic acid, polymethylenepolyphenylene ester |
| 1 | 57 | 78-79-5 | Isoprene |

| | | | |
|---|-----|------------|--|
| 1 | 58 | 25068-38-6 | 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-Chloro-2,3-epoxypropane |
| 1 | 59 | 108-67-8 | Mesitylene |
| 1 | 60 | 79-41-4 | Methacrylic acid |
| 1 | 61 | 111-77-3 | 2-(2-Methoxyethoxy)ethanol |
| 1 | 62 | 108-87-2 | Methylcyclohexane |
| 1 | 63 | 101-68-8 | 4,4'-Methylenediphenyl diisocyanate |
| 1 | 64 | 872-50-4 | N-Methylpyrrolidinone |
| 1 | 65 | 8030-30-6 | Naphtha |
| 1 | 66 | 91-20-3 | Naphthalene |
| 1 | 67 | 1313-99-1 | Nickel(II) oxide |
| 1 | 68 | 13770-89-3 | Nickel(II) sulfamate |
| 1 | 69 | 7786-81-4 | Nickel(II) sulfate |
| 1 | 70 | 556-67-2 | Octamethylcyclotetrasiloxane |
| 1 | 71 | 111-65-9 | Octane |
| 1 | 72 | 6197-30-4 | Octocrilene |
| 1 | 73 | 144-62-7 | Oxalic acid |
| 1 | 74 | 101-80-4 | 4,4'-Oxydianiline |
| 1 | 75 | 111-46-6 | 2,2'-Oxydiethanol |
| 1 | 76 | 108-95-2 | Phenol |
| 1 | 77 | 98-83-9 | 2-Phenylpropene |
| 1 | 78 | 10025-87-3 | Phosphoryl trichloride |
| 1 | 79 | 7757-79-1 | Potassium nitrate |
| 1 | 80 | 71-23-8 | 1-Propanol |
| 1 | 81 | 409-21-2 | Silicon carbide |
| 1 | 82 | 7775-09-9 | Sodium chlorate |
| 1 | 83 | 7758-19-2 | Sodium chlorite |
| 1 | 84 | 7681-49-4 | Sodium fluoride |
| 1 | 85 | 7631-90-5 | Sodium hydrogensulfite |
| 1 | 86 | 100-42-5 | Styrene |
| 1 | 87 | 7664-93-9 | Sulfuric acid |
| 1 | 88 | 100-21-0 | Terephthalic acid |
| 1 | 89 | 75-91-2 | Tert-butyl hydroperoxide |
| 1 | 90 | 98-54-4 | 4-Tert-butylphenol |
| 1 | 91 | 4067-16-7 | 3,6,9,12-Tetraazatetradecamethylenediamine |
| 1 | 92 | 79-94-7 | 2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol |
| 1 | 93 | 75-59-2 | Tetramethylammonium hydroxide |
| 1 | 94 | 140-66-9 | 4-(1,1,3,3-Tetramethylbutyl)phenol |
| 1 | 95 | 7550-45-0 | Titanium tetrachloride |
| 1 | 96 | 108-88-3 | Toluene |
| 1 | 97 | 2451-62-9 | Triglycidyl isocyanurate |
| 1 | 98 | 95-63-6 | 1,2,4-Trimethylbenzene |
| 1 | 99 | 115-86-6 | Triphenyl phosphate |
| 1 | 100 | 101-02-0 | Triphenyl phosphite |
| 1 | 101 | 597-82-0 | O,O,O-Triphenyl phosphorothioate |

| | | | |
|---|-----|------------|--------------------------------|
| 1 | 102 | 42978-66-5 | Tripropylene glycol diacrylate |
| 1 | 103 | 26523-78-4 | Tris(nonylphenyl) phosphite |
| 1 | 104 | 100-40-3 | 4-Vinylcyclohexene |
| 1 | 105 | 7646-85-7 | Zinc chloride |
| 1 | 106 | 1314-13-2 | Zinc oxide |

Note:

1. A registrant shall, after obtaining a phase 1 registration number of the existing chemical substance listed in this Appendix, complete the information items specified in Appendix 3 within the following prescribed deadlines:
 - (1) For a phase 1 registration number first obtained before December 31, 2019, the registrant shall complete the information items specified in Appendix 3 before December 31, 2023, if the registered annual manufactured or imported quantity is 1 ton or more.
 - (2) For a phase 1 registration number first obtained after January 1, 2020, the registrant shall, counting from January 1 of the following year upon obtaining the number, complete the information items specified in Appendix 3 within four years, if the registered annual manufactured or imported quantity is 1 ton or more.
 - (3) For an existing chemical substance at annual manufactured or imported quantity of less than 1 ton when first obtaining the phase 1 registration number, the registrant shall complete the information items specified in Appendix 3 within four years, counting from January 1 of the following year, if the substance's actual annual manufactured or imported quantity reaches 1 ton or more after January 1, 2020.
 - (4) For reapplication for a phase 1 registration due to cancellation of a phase 1 registration number, the registrant, if subject to the standard registration pursuant to the previous three paragraphs, shall complete the information items specified in Appendix 3 within the deadlines specified in the previous three paragraphs after obtaining a phase 1 registration number again; or complete the information items specified in Appendix 3 at the time of reapplication of the phase 1 registration if the deadlines specified in the previous three paragraphs are due.
 - (5) Registrants who complete information items specified in Appendix 3 will be issued with a completion number in accordance with Article 18, paragraph 1. The said registrants shall, as prescribed in Article 18, paragraph 2, submit information items specified in Appendix 4 proactively or as prescribed by the central competent authority by an appointed due date.
2. The existing chemical substances listed in this Appendix shall be identified according to the CAS Registry Numbers. The names presented are for reference only.

Appendix 10

Reporting Items of New and Existing Chemical Substances

| Sections | Items |
|---------------------------------------|---|
| 1. Registrant and Registration Number | 1.1 Registrant information 1.2 Registration number |
| 2. Manufactured and Imported Quantity | 2.1 Manufactured quantity 2.2 Imported quantity |