

Toppan Group

**Green Procurement Guidelines
in Packaging Business**

Ver. 5.0

**Revised: 28 September 2022
Enforced: 30 September 2022
Toppan Inc.**

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I. About the Green Procurement Standard

1. Purpose

At Toppan Inc., the “Toppan Declaration on the Global Environment” outlines the fundamental concepts behind our environmental conservation efforts and on-going measures towards addressing global environmental issues to fulfill our Corporate Social Responsibility (CSR).

At Toppan Inc. we believe that upstream management of each process, even going upstream to raw materials, is essential for realizing our goal.

Hence, as part of our CSR, we established “Toppan Group Standards for the Management of Chemical Components of Raw Materials”, and request that our suppliers comply with these requirements to ensure control over chemical substances in raw material procured across the whole Toppan group.

Our Living & Industry Division now also provides “Toppan Group Green Procurement Guidelines in Packaging Business” (hereafter referred to as “Green Procurement Guidelines”), which is a more stringent standard in addition to our “Toppan Group Standards for the Management of Chemical Components of Raw Materials” to ensure the safety and reliability of the packaging materials, which are our products. The green procurement guidelines outline our basic philosophy pertaining to such procurement, along with specific standards and the way they are to be utilized. Living & Industry Division, together with Toppan affiliates intends to continue developing comprehensive measures with the environment in mind.

Accordingly, Toppan Group will actively engage in development, production, and sales of eco-friendly packaging materials by preferentially conducting transactions and purchasing from suppliers that offer raw materials that are in compliance with the Green Procurement Guidelines.

In line with the revision of “Toppan Group Sustainable Procurement Guidelines” and “Toppan Group Standards for the Management of Chemical Components of Raw Materials”, “Toppan Group Green Procurement Guidelines in Packaging Business” have also been revised.

2. Scope of Application

The Green Procurement Guidelines apply whenever required materials are procured from external sources by the Purchase/Production Control Departments of all Toppan Group Companies, which are engaged in packaging business (packaging material production operations of Living & Industry Division).

3. Basic Concept of Green Procurement in Packaging Business

In our packaging business, Green Procurement is implemented by first comprehensively evaluating both the actions/measure for environmental issues and the products of our suppliers; second, we evaluated the total “Green Scores” determined for each supplier; finally, we preferentially purchase products with higher Green Scores.

The Green Procurement Guidelines consists of “Standards for Raw Material Selection” for the assessment of their products themselves. Here, business operations refers comprehensively to research & development, manufacturing, and sales of products.

The “Standards for Raw Material Selection” consists of “Food(use) Products Raw Material Standards,” which stipulates details regarding all raw materials procured for the packaging business, including base paper, materials, etc. (from this point, referred to as raw materials*) and “Packaging Business Self-Management Standards.”

*The “Standards for Raw Material Selection” is not applied to chemical substances used in research and development, raw materials specifically designed by customers, molds, tools, machinery equipment and the like, which do not come in direct contact with products. The standard is applied even in cases of research and development purposes in the event materials are provided to entities outside of Toppan Group.

4. How to use the Green Procurement Guidelines

- 1) Toppan Group asks all its suppliers to self-evaluate their products based on the Green Procurement Guidelines when an initial order is placed (or when finished products are delivered). Self-evaluations should also be repeated, in the event of a change, such as revision of these guidelines or a change of the materials or facilities used. The results of self-evaluations should be submitted to Toppan divisions (companies) to which products are delivered or to our department when requested as necessary. There is a possibility that the results will be assessed at those divisions (companies).
- 2) The self-evaluation results will be shared among Toppan Group companies and will be used in our selecting of suppliers and products.
- 3) We ask that you engaged in self-improvement efforts if you should fall short of the Green Procurement Guidelines. There will likely be some cases in which the division (company) to which products are delivered will specifically ask such suppliers to improve the situation.
- 4) The submitted materials and any other related information gathered from inquiries will only be used at Toppan Inc. and its affiliates involved in the Group’s packaging business and will never be released to the public.

- 5) These guidelines will be revised from time to time based on changes in social conditions and related laws & regulations.

5. Contact Information

Toppan Inc.

Living & Industry Div., Living & Industry Manufacturing Subdivision, Purchasing Dept.

Tel.: 03-3835-6321

Living & Industry Div., Living & Industry Manufacturing Subdivision, Quality Assurance Dept.

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Revision History

No.	Date of revision	Revision content
Ver.1.0	14 th March 2005	Establishment
Ver.2.0	1 st June 2007	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.2.1	11 th June 2007	Revision associated with correction of typos, etc.
Ver.2.2	20 th April 2009	Revision due to change of the division names.
Ver.3.0	06 January 2010	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.4.0	28 th March 2012	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.4.1	30 th November 2012	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.4.2	14 th February 2014	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.4.3	1 st December 2016	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.4.4	1 st May 2018	Revision associated with the establishment of "Toppan Group Control Standards for Chemical Substances in Raw Materials"
Ver.5.0	22 nd September 2022	Revision associated with the establishment of "Toppan Group Sustainable Procurement Guidelines" and "Toppan Group Standards for the Management of Chemical Components of Raw Materials"

Main revisions added

- (1) Deleted " The Standard for Environmental Measures " to avoid duplication, as "Toppan Group Sustainable Procurement Guidelines" were revised in 2022 and have similar items. In line with this, the wording of ' Section I.3. Basic Concept of Green Procurement in Packaging Business for Package Businesses' was amended and the relevant form in ' Section II.2. Operations
- (2) Revised to add the standards of JCII (Japan Chemical Innovation and Inspection Institute) FCMSC(Food Contact Material Safety Center) to the Table 1 Regulations concerning Food Sanitation Act & Voluntary Standards in Section II.1. Voluntary standards of JHOSPA (Japan Hygienic Olefin and Styrene Plastics Association) and Voluntary standards of JHPA (Japan Hygienic PVC Association) were succeeded by FCMSC.
- (3) Deleted " Reduced substances " in Section II.1. Accordingly, the word "Reduced Substances" was

deleted.

- (4) Corrected section II.3.
- (5) Added " Phthalates " to Supplementary Table VII in controlled substances.
- (6) Added " almond " to Supplementary Table VIII in controlled substances.
- (7) Corrected Attachement 4.

II. Material Selection Standards

1. About the Material Selection Standards

In the packaging business, in addition to "Toppan Group Standards for the Management of Chemical Components of Raw Materials" as additional standards for Toppan Group Packaging business aimed at decreasing environmental load and securing food safety, the Material Selection Standards, in the following sections 1-3, are specified for procuring materials, which conform to these principles.

- (1) Standards concerning materials for products used with foods (Products used in contact with food)

For products produced in the packaging business, which contact with foods, to ensure legal compliance and food safety, materials that meet the requirements of the regulations concerning the Food Sanitation Act, voluntary industry standards, and government notices / notification described in Table 1 are used.

Table 1 Regulations concerning Food Sanitation Act & Voluntary Standards

Standards / Regulations	Applicable materials
Specifications and Standards for Food and Food Additives, etc. (Ministry of Health and Welfare Notification No. 370, 1959)	Materials for which standards are established
No elusion of fluorescent materials (Kansyoku No. 244, 1971)	Materials used for the contact surface with foods
No inclusion of PCB (Kanshoku 442, 1972)	All materials
Voluntary standards of JCII (Japan Chemical Innovation and Inspection Institute) FCMSC(Food Contact Material Safety Center)	Synthetic resins and processed products Synthetic resins and processed products
Voluntary standards of JAPAN ASSOCIATION OF MILK PACKAGING AND MACHINERY	Raw materials for milk and other containers and packaging
Voluntary Regulation Concerning Printing Inks of JPIMA	Ink
Voluntary standards of JAIA	Adhesive for laminate, adhesive for laminating paper
Voluntary standards of JPA	Paper/paperboard intended to contact foods
Voluntary standards of other industries	Materials applied to voluntary standards

*The latest versions of regulations and standards should be applied.

*In case of new voluntary standard in the industry, these should be applied from the date of enforcement.

*Reprocessed plastics are judged based on “Guidelines concerning use of reprocessed plastic materials for food contact/packaging materials” issued by MHLW.

- Regarding products used for medical goods, compliance is required with “Standards Concerning Materials for the Products used for Foods,” and the materials should meet the requirements of “Pharmaceutical and Medical Device Act (PMD Act)” and other related and applicable regulations.

(2) Voluntary control standards in the packaging industry

In addition to “Standards Concerning Materials for the Products used for Foods,” “Voluntary Control Standards for Packaging industries” (hereinafter referred to as “Voluntary Control Standards”) shall be set. These Voluntary Control Standards include Toppan Group Standards for the Management of Chemical Components of Raw Materials.

Voluntary control standards, for the purpose of decreasing environmental load and securing food safety, control the chemical substances by categorizing chemical substances that may affect the environment of food safety into substances prohibited in product, substances to be reduced and to be controlled.

For our voluntary control standards “inclusion” is defined as follows:

- 1) Intentional inclusions: Regardless of concentrations in the product, if the substances concerned are used as starting materials and/or additives intentionally, or the substances concerned are intentionally produced as components of the products, and such substances exist in the products at a detectable level*.

*Detectable level: concentration detectable with the latest available analysis techniques.

- 2) Unintentional inclusions: regardless of the reason for inclusion, such substances are considered to be residual impurities in the product.

Impurities: Substances not intended to be included in the product. For example, processing aids, unintentionally created substances/attached substances/ contamination added during the production process, substances included in natural materials, or impurities contained in materials, which are not removed during purification processes and remain in the product.

- Information should be provided in the case of a product, which does not contain substances concerned but can clearly react with another product as a two-part reaction to generate substances of concern as reaction products.

Banned substances: the chemical substances described in Table 3 are banned substances and only products which do not contain these substances will be considered for purchase.

Controlled substances: Chemical substances described in Table 4 are subject to control. Although inclusion and use are not restricted at the moment, the use and status of inclusion shall be controlled as needed.

- Regarding substances not described in Tables 3-4, some of the carcinogens (e.g., substances belong to group 1 or Group 2A of the International Agency for Research on Cancer (IARC) and other (suspected) toxic substances [e.g., substances categorized in List 6 of EU Scientific Committee for Food (SCF)], or environmentally hazardous substances (e.g., substances controlled by the PRTR Law, volatile organic compounds) which are listed as object of research. Hereafter, if these chemical substances are considered to have negative effects or new regulations are enforced, those substances will be added to the banned substances or Controlled substances lists.

(3) Additional standards

1) Standards for exported products

For products produced in our packaging business, which are exported overseas (including the products exported by customers), we will selected materials that meet the requirements of the regulations/standards of the destination country*, in addition to the standards (1) and (2). In some cases, submission of certificate of conformance is required. If regulations in the destination country are unknown, ensure compliance with the FDA Standard and Plastic Implementation Measure.

*As examples of the regulations, there are Standard for Food and Drug Administration (FDA) Standard and Plastic Implementation Measure (CFR: Code of Federal Regulations), Commission Regulations EU No 1935/2004).

2) Standards of customers

To meet our customers' needs within the Green Procurement Standard, other regulations may need to be established for products provided to specific customers. In this case, individual support by related suppliers shall be required.

2. Operations

(1) Requests to suppliers

Regarding procured products, which do not meet the "Material Selection Standard," we hope that our suppliers will voluntarily take measures, such as changing materials to meet the standards.

We will not procure product that contain "Banned substances."

(2) Documents to be submitted

We would like to ask our suppliers to submit the following documents for the initial order (delivery) by product procured. In case of any change in submitted documents, suppliers may submit the revised documents to the delivery destination department (company) if needed, or please submit the revised documents if we request the submission.

Table 2. Documents to be submitted

Document	Frequency of submission
1) Non-containing Guarantee for banned substances (Attachment 1)	<ul style="list-style-type: none">• At the 1st procurement for a new customer• When any change in the documents occurs¹
2) List of products containing banned substances (Attachment 2)	<ul style="list-style-type: none">• When there is a product containing banned substances.
3) List of products containing banned substances (Attachment 3)	<ul style="list-style-type: none">• At the 1st procurement for a new customer• When any change in the documents occurs¹• When ChemSHEREPA-AI/CI controlled substances are revised for ChemSHERPA
4) Regulations concerning Food Sanitation Act / Voluntary standards (Attachment 4)	
5) SDS for chemical products: SDS (Attachment 5-1)	
6) ChemSHEREPA-AI/CI (Attachment 5-2) ²	

¹ When any change in this document occurs including cases when the contents of banned substances and controlled substances are changed because since this Green Procurement Standards are revised.

² Please submit chemSHERPA-AI/CI describing materials or substances which compose the procured products, and weight-composition ratio. For general information about chemSHERPA refer to the chemSHERPA homepage (URL: <https://chemsherpa.net/chemSHERPA/>)

(3) Submission of research results concerning chemical substances contained in delivered products

We may ask our suppliers to conduct research on chemical substances contained in delivered products separately. In this case, we hope to have your response. If the use or inclusion of the substances that are subject to the research is unclear, please confirm with manufactures or materials makers retroactively.

The results submitted will be considered as the proper reports about chemical substances contained in the suppliers products. In case of any change or mistake in the results submitted please submit the revisions immediately.

<Documents to be submitted>

1) Research response sheet for Chemical Substances contained in delivered products

Response Sheet will be sent to our suppliers when the research is performed.

(4) Handling of your response

1) Certification of Green Products

On the basis of the response to the research on chemical substance (refer to the above Table 2, Documents to be submitted), we will assess the conformity to Materials Selection Standards and certify the materials that conform to "Standards concerning materials for the

products used for foods” and do not contain banned substances as “Green Products”.

2) Procurement of Green Products

In Toppan Group packaging business, “Green Products” are procured preferentially. Products containing banned substances will not be procured. Products that do not conform to “Standards concerning materials for the products used for foods,” will be switched to “Green Products”.

3. Differences Between Material Selection Standards and Toppan Group Standards for the Management of Chemical Components of Raw Materials

Material Selection Standards for Green Procurement Standards (hereinafter referred to as Material Selection Standards) include Control standards for Toppan Group Standards for the Management of Chemical Components of Raw Materials (hereinafter referred to as Toppan Group Standards). The differences between these standards are described below.

(1) Banned Substances

The Material Selection Standards define Class 1 & 2 specified chemical substances under Japanese Chemical Substances Control Law and banned substances for production under the industrial safety and health act as banned substances. Regardless of concentration, unintentional inclusion is prohibited.

(2) Controlled substances

If EU-REACH listed substance (SVHC), which are subject to control by ChemSHERPA are added as candidate substances, please conduct research and report to us if you find their inclusion

Table 3: Banned substances

Substance	CAS No.	Comments
Japanese Chemical Substances Control Law (Class I Specified Chemical Substances)		Unintentional inclusion is not allowed. Compliance with the regulation values is expected once determined.
Japanese Chemical Substances Control Law (Class II Specified Chemical Substances)		
Industrial Safety and Health Act (Substances Prohibited of Manufacturing etc.)		
Ozone-depleting substances		Unintentional inclusion is not allowed. Should not be contained in any products; use in manufacturing processes is also prohibited, except uses as a cooling medium in a closed system and nto released into the air.
Radioactive substances		Unintentional inclusion is not allowed. Gamma ray or electron beam irradiation does not apply.
Fluorinated greenhouse gas (SF ₆ , HFCS, PFCS)		Unintentional inclusion is not allowed.
Azo colorants forming certain amines		Inclusion of more than 30mg/kg will be evaluated.
Cadmium and its compounds		The use of hexavalent chromium compounds for plating is excluded. The unitentional inclusion limit is 100ppm.
Lead and its compounds		
Mercury and its compounds		
Hexavalent chromium and its compounds		
Polybrominated biphenyls (PBB) [group]		Compliance depends on the inclusion definition.
Polybrominated diphenyl ethers (PBDE) [group]		
Vinyl chloride monomer		Migration testing for food container should be less than 1ppm.
PCT (polychlorinatedterphenyl)		Unintentional inclusion is not allowed.
Benzophenone	119-61-9	Unintentional inclusion is not allowed.
Tris(2,3-dibromopropan-1-yl) phosphate (TBPP)	126-72-7	Unintentional inclusion is not allowed.
Tris(1-aziridinyl)phosphine oxide (TEPA)	545-55-1	Unintentional inclusion is not allowed.
C.I. Direct Black 38	1937-37-7	Limit of unintentional inclusion is 0.006 ppm
Perchlorates		Limit of unintentional inclusion is 0.1 ppm
Dimethyl fumarate	624-49-7	Limit of unintentional inclusion is 1000 ppm
Dichloromethane	75-09-2	Limit of unintentional inclusion is 1000 ppm
1,2-Dichloropropane	78-87-5	Limit of unintentional inclusion is 1000 ppm

The most recent regulations apply in relation to the “Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc” and substances restricted by the Industrial Safety and Health Act.

Table 4: Controlled substances

Substance	CAS No.	Comment
Poisonous and Deleterious Substances Control Law (Specified Poisonous Substances)		http://www.nihs.go.jp/law/dokugeki/dokugeki.html
CLP [Annex VI Table 3.2 CMR-cat. 1,2]		https://echa.europa.eu/information-on-chemicals/annex-vi-to-clp
Proposition 65 Safe Drinking Water and Toxic Enforcement Act of 1986		https://oehha.ca.gov/proposition-65
chemSHERPA reference list		https://chemsherpa.net/chemSHERPA/tool/
Cobalt and its compounds		
Boric acid and its compounds		
Titanium(IV) acetylacetonate and 2,4-Pentanedione		Use restricted substances in ink in EU.
4,4'-Bis(diethylamino) benzophenone	90-93-7	
Polyvinyl chloride		
Polyvinyl idene chloride	9002-85-1	
Melamine	108-78-1	
Butylated hydroxyanisole (BHA)	25013-16-5	
Bisphenol A diglycidyl ether (BADGE)	1675-54-3	
Bisphenol F diglycidyl ether (BFDGE)	39817-09-9	
Novolac glycidyl ethers (NOGE)		
2-Isopropylthioxanthone	5495-84-1	
Alkyl phenoxy ethoxylates		
C.I. Pigment Green 7	1328-53-6	
C.I. Pigment Green 36	14302-13-7	
C.I. Pigment Yellow 138	30125-47-4	
Latex		
Regenerated pulp		
Fluorescent Substance		
Jatropha Oil		
Aromatic isocyanates		
Allergens		
Antimony and its compounds		For food container/packaging, and toys
Organo-tin compounds		
Bisphenol S (BPS)	80-09-1	
Bisphenol F (BPF)	87139-40-0	
4-methylbenzophenone	134-84-9	
3-glycidoxypropyltrimethoxysilane (GPTMS)	2530-83-8	
Nanomaterials		Covering relevant chemical substances less than 100 nm in size.
Phthalates		Phthalate esters, defined in Standards for Foodstuffs and Additives will follow the standard.
Alkylated(C5-C9) phenols		

1) Limited to Substances forbidden from inclusion.

2) The table in this document is not a complete list. For convenience, refer to the "Table of harmonised entries" Table 3, Annex VI, of the ECHA CLP regulations, following the URL in the comments column.

3) Reference definitions

Definition 1: Nanomaterials are defined according to the EU Regulation for information about food products to provide to consumers (EU No 1169-2011), as given below.

Definition 2: 'nanomaterial' means an insoluble or biopersistent and intentionally manufactured material with one or more external dimensions, or an internal structure, on the scale from 1 to 100 nm according to (EC) No 1223-2009

Supplementary Table I: CSCL (Class 1 Specified Chemical Substances)

No	CAS No	Substance name
1	-	Polychlorinated biphenyls (PCBs) and specific substitutes
2	-	Polychlorinated naphthalenes(2 or more chlorine atoms)
3	118-74-1	Hexachlorobenzene
4	309-00-2	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-exo-1,4-endo-5,8-dimethanonaphthalene (Synonym: Aldrin)
5	-	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-exo-1,4-endo-5,8-dimethanonaphthalene (Synonym: Dieldrin)
6	72-20-8	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo-1,4-endo-5,8-dimethanonaphthalene (Synonym: Endrin)
7	50-29-3	1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane (Synonym: DDT)
8	-	1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methano-1H-indene and their analogous compounds (Synonym: Chlordane or Heptachlor)
9	-	Bis(tributyltin)oxide
10	-	N,N'-Ditolyl-p-phenylenediamine, N-Tolyl-N'-xylyl-p-phenylenediamine, or N,N'-Dixylyl-p-phenylenediamine
11	732-26-3	2,4,6-Tri-tert-butylphenol
12	8001-35-2	Polychloro-2,2-dimethyl-3-methylidenebicyclo[2.2.1]heptane (Synonym: Toxaphene)
13	2385-85-5	Dodecachloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decane (Synonym: Mirex)
14	-	2,2,2-Trichloro-1-(2-chlorophenyl)-1-(4-chlorophenyl)ethanol or 2,2,2-Trichloro-1,1-bis(4-chlorophenyl)ethanol (Synonym: Kelthane or Dicofol)
15	87-68-3	Hexachlorobuta-1,3-diene
16	3846-71-7	2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol
17	-	Perfluoro(octane-1-sulfonic acid) (Synonym: PFOS) or its salts
18	307-35-7	Perfluoro(octane-1-sulfonyl) fluoride (Synonym: PFOSF)
19	608-93-5	Pentachlorobenzene
20	319-84-6	r-1,c-2,t-3,c-4,t-5,t-6-Hexachlorocyclohexane (Synonym: alpha-Hexachlorocyclohexane)
21	319-85-7	r-1,t-2,c-3,t-4,c-5,t-6-Hexachlorocyclohexane (Synonym: beta-Hexachlorocyclohexane)
22	58-89-9	r-1,c-2,t-3,c-4,c-5,t-6-Hexachlorocyclohexane (Synonym: gamma-Hexachlorocyclohexane or Lindane)
23	143-50-0	Decachloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decan-5-one (Synonym: Chlordecone)
24	-	Hexabromobiphenyl
25	-	Tetrabromo(phenoxybenzene) (Synonym: Tetrabromodiphenyl ether)
26	-	Pentabromo(phenoxybenzene) (Synonym: Pentabromodiphenyl ether)
27	-	Hexabromo(phenoxybenzene) (Synonym: Hexabromodiphenyl ether)
28	-	Heptabromo(phenoxybenzene) (Synonym: Heptabromodiphenyl ether)
29	-	6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide (synonym: Endosulfan or Benzoepin)
30	-	Hexabromocyclododecane ; HBCDD;
31	-	Pentachlorophenol and its salts and esters

32	-	Polychlorinated normal paraffin (It is limited that the number of carbon is 10 to 13 and the content of chlorine is more than 48% of the total weight.)
33	1163-19-5	1,1'-Oxybis(2,3,4,5,6-pentabromobenzene) (synonym: Decabromodiphenyl ether)
34	-	Perfluorooctanoic acid (Synonym: PFOA) or its salt

*Including representative componds

Supplementary Table II: CSCL (Class 2 Specified Chemical Substances)

No	CAS No.	Substance name
1	79-01-6	Trichloroethylene
2	127-18-4	Tetrachloroethylene
3	56-23-5	Carbon tetrachloride
4	-	Triphenyltin compounds
5	-	Tributyltin compounds

Triphenyltin and tributyltin compounds, which are not designated as Class II Specified Chemical Substances are also substances that are prohibited from inclusion.

Supplementary Table III: ISHL (Substances Prohibited for use in manufacturing)

No.	CAS No	Substance name
1	-	Yellow phosphorus matches
2	92-87-5	Benzidine and its salts
3	92-67-1	4-Aminodiphenyl
4	1332-21-4	Asbestos
5	92-93-3	4-Nitrodiphenyl
6	542-88-1	Oxybis[chloromethane]
7	91-59-8	2-Naphthylamine
8	-	Rubber glue containing benzene

Supplementary Table IV: Ozone depleting substances

(1) Montreal Protocol Annex A Group I (Specified CFCs)

No	CAS No	Substance name
1	75-69-4	Trichlorofluoromethane (CFC-11)
2	75-71-8	Dichlorodifluoromethane (CFC-12)
3	76-13-1	Trichlorotrifluoroethane (CFC-113)
4	354-58-5	Trichlorotrifluoroethane (CFC-113a)
5	76-14-2	Dichlorotetrafluoroethane (CFC-114)
6	76-15-3	Chloropentafluoroethane (CFC-115)

(2) Montreal Protocol Annex A Group II (Halons)

No	CAS No	Substance name
1	353-59-3	Bromochlorodifluoromethane (Halon-1211)
2	75-63-8	Bromotrifluoromethane (Halon-1301)
3	124-73-2	Dibromotetrafluoroethane (Halon-2402)

(3) Montreal Protocol Annex B Group I (Other CFCs)

No	CAS No	Substance name
1	75-72-9	Chlorotrifluoromethane (CFC-13)
2	354-56-3	Pentachlorofluoroethane (CFC-111)
3	76-12-0	Tetrachlorodifluoroethane (CFC-112)
4	422-78-6 135401-87-5	Heptachlorofluoropropane (CFC-211)
5	3182-26-1	Hexachlorodifluoropropane (CFC-212)
6	2354-06-5 134237-31-3	Pentachlorotrifluoropropane (CFC-213)
7	29255-31-0	Tetrachlorotetrafluoropropane (CFC-214)
8	1599-41-3	Trichloropentafluoropropane (CFC-215)
9	76-17-5	Trichloropentafluoropropane (CFC-215ba)
10	4259-43-2	Trichloropentafluoropropane (CFC-215cb)
11	661-97-2	Dichlorohexafluoropropane (CFC-216)
12	422-86-6	Chloroheptafluoropropane (CFC-217)

(4) Montreal Protocol Annex B Group II

No	CAS No	Substance name
1	56-23-5	Tetrachloromethane

(5) Montreal Protocol Annex B Group III

No	CAS No	Substance name
1	71-55-6	1,1,1-Trichloroethane

(6) Montreal Protocol Annex C (substitute HCFCs)

No	CAS No	Substance name
1	75-43-4	Dichlorofluoromethane (HCFC-21)
2	75-45-6	Chlorodifluoromethane (HCFC-22)
3	593-70-4	Chlorofluoromethane (HCFC-31)
4	134237-32-4	Tetrachlorofluoroethane (HCFC-121)
5	41834-16-6	Trichlorodifluoroethane (HCFC-122)
6	306-83-2 354-23-4 812-04-4	Dichlorotrifluoroethane (HCFC-123)
7	2837-89-0 354-25-6	Chlorotetrafluoroethane (HCFC-124)
8	134237-34-6	Trichlorofluoroethane (HCFC-131)
9	25915-78-0	Dichlorodifluoroethane (HCFC-132)
10	75-88-7	Chlorotrifluoroethane (HCFC-133)
11	-	Dichlorofluoroethane (HCFC-141)
12	1717-00-6	1,1-Dichloro-1-fluoroethane (HCFC-141b)
13	-	Chlorodifluoroethane (HCFC-142)
14	75-68-3	1-Chloro-1,1-difluoroethane (HCFC-142b)
15	1615-75-4	Chlorofluoroethane (HCFC-151)

16	134237-35-7	Hexachlorofluoropropane (HCFC-221)
17	134237-36-8	Pentachlorodifluoropropane (HCFC-222)
18	134237-37-9	Tetrachlorotrifluoropropane (HCFC-223)
19	134237-38-0	Trichlorotetrafluoropropane (HCFC-224)
20	-	Dichloropentafluoropropane (HCFC-225)
21	422-56-0	3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
22	507-55-1	1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
23	134308-72-8	Chlorohexafluoropropane (HCFC-226)
24	134190-48-0	Pentachlorofluoropropane (HCFC-231)
25	134237-39-1	Tetrachlorodifluoropropane (HCFC-232)
26	134237-40-4	Trichlorotrifluoropropane (HCFC-233)
27	127564-83-4	Dichlorotetrafluoropropane (HCFC-234)
28	134237-41-5	Chloropentafluoropropane (HCFC-235)
29	134190-49-1	Tetrachlorofluoropropane (HCFC-241)
30	134237-42-6	Trichlorodifluoropropane (HCFC-242)
31	134237-43-7	Dichlorotrifluoropropane (HCFC-243)
32	134190-50-4	Chlorotetrafluoropropane (HCFC-244)
33	134190-51-5	Trichlorofluoropropane (HCFC-251)
34	134190-52-6	Dichlorodifluoropropane (HCFC-252)
35	134237-44-8	Chlorotrifluoropropane (HCFC-253)
36	134237-45-9	Dichlorofluoropropane (HCFC-261)
37	134190-53-7	Chlorodifluoropropane (HCFC-262)
38	134190-54-8	Chlorofluoropropane (HCFC-271)

(7) Montreal Protocol Annex C Group II [Halons substitués (HBFCs)]

No	CAS No.	Substance name
1	1868-53-7	Dibromofluoromethane (Halone-1102)
2	1511-62-2	Bromodifluoromethane (Halone-1201)
3	373-52-4	Bromofluoromethane (Halone-1101)
4	306-80-9	Tetrabromofluoroethane (Halone-2104)
5	-	Tribromodifluoroethane (Halone-2203)
6	354-04-1	Dibromotrifluoroethane (Halone-2302)
7	124-72-1	Bromotetrafluoroethane (Halone-2401)
8	-	Tribromofluoroethane (Halone-2103)
9	75-82-1	Dibromodifluoroethane (Halone-2202)
10	421-06-7	Bromotrifluoroethane (Halone-2301)
11	358-97-4	Dibromofluoroethane (Halone-2102)
12	359-07-9	Bromodifluoroethane (Halone-2201)
13	762-49-2	Bromofluoroethane (Halone-2101)
14	-	Hexabromofluoropropane (Halone-3106)
15	-	Pentabromodifluoropropane (Halone-3205)
16	-	Tetrabromotrifluoropropane (Halone-3304)
17	-	Tribromotetrafluoropropane (Halone-3403)
18	431-78-7	Dibromopentafluoropropane (Halone-3502)

19	2252-78-0	Bromohexafluoropropane (Halone-3601)
20	-	Pentabromofluoropropane (Halone-3105)
21	-	Tetrabromodifluoropropane (Halone-3204)
22	-	Tribromotrifluoropropane (Halone-3303)
23	-	Dibromotetrafluoropropane (Halone-3402)
24	460-88-8	Bromopentafluoropropane (Halone-3501)
25	-	Tetrabromofluoropropane (Halone-3104)
26	70192-80-2	Tribromodifluoropropane (Halone-3203)
27	70192-83-5	Dibromotrifluoropropane (Halone-3302)
28	679-84-5	Bromotetrafluoropropane (Halone-3401)
29	75372-14-4	Tribromofluoropropane (Halone-3103)
30	460-25-3	Dibromodifluoropropane (Halone-3202)
31	421-46-5	Bromotrifluoropropane (Halone-3301)
32	51584-26-0	Dibromofluoropropane (Halone-3102)
33	-	Bromodifluoropropane (Halone-3201)
34	352-91-0	Bromofluoropropane (Halone-3101)

(8) Montreal Protocol Annex C Group III

No	CAS No	Substance name
1	74-97-5	Bromochloromethane

(9) Montreal Protocol Annex E Group I

No	CAS No	Substance name
1	74-83-9	Methyl bromide

Supplementary Table V

Fluorinated greenhousegases (SF6, HFCS, PFCS)

No	CAS No	Substance name
1	10024-97-2	Dinitrogen oxide
2	75-46-7	Trifluoromethane (HFC-23)
3	75-10-5	Difluoromethane (HFC-32)
4	593-53-3	Fluoromethane (HFC-41)
5	354-33-6	Pentafluoroethane (HFC-125)
6	359-35-3	1,1,2,2-Tetrafluoroethane (HFC-134)
7	811-97-2	1,1,1,2-Tetrafluoroethane (HFC-134a)
8	430-66-0	1,1,2-Trifluoroethane (HFC-143)
9	420-46-2	1,1,1-Trifluoroethane (HFC-143a)
10	624-72-6	1,2-Difluoroethane (HFC-152)
11	75-37-6	1,1-Difluoroethane (HFC-152a)
12	353-36-6	Fluoroethane (HFC-161)
13	431-89-0	2H-Heptafluoropropane (HFC-227ea)
14	690-39-1	1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)
15	431-63-0	1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)
16	677-56-5	1,1,1,2,2,3-Hexafluoropropane (HFC-236cb)
17	679-86-7	1,1,2,2,3-Pentafluoropropane (HFC-245ca)

18	460-73-1	1,1,1,3,3-Pentafluoropropane (HFC-245fa)
19	406-58-6	1,1,1,3,3-Pentafluoropropane (HFC-365mfc)
20	138495-42-8	2H,3H-Decafluoropentane (HFC-43-10mee)
21	75-73-0	Perfluoromethane (PFC-14)
22	76-16-4	Perfluoroethane (PFC-116)
23	76-19-7	Perfluoropropane (PFC-218)
24	931-91-9	Perfluorocyclopropan
25	115-25-3	Perfluorocyclobutane (PFC-c318)
26	355-25-9	Perfluorobutane (PFC-31-10)
27	678-26-2	Perfluoropentane (PFC-41-12)
28	355-42-0	Perfluorohexane (PFC-51-14)
29	306-94-5	Perfluorodecalin (PFC-91-18)
30	2551-62-4	Sulfurhexafluoride (SF6)
31	7783-54-2	Nitrogen trifluoride

Supplementary Table VI: Azo colorants forming certain amines

No	CAS No	Substance name
1	92-67-1	Biphenyl-4-ylamine 4-Aminobiphenyl xenylamine
2	92-87-5	Benzidine
3	95-69-2	4-Chloro-o-toluidine
4	91-59-8	2-Naphthylamine
5	97-56-3	o-Aminoazotoluene 4-Amino-2',3-dimethylazobenzene 4-o-Tolylazo-o-toluidine
6	99-55-8	5-Nitro-o-toluidine
7	106-47-8	4-Chloroaniline
8	615-05-4	4-Methoxy-m-phenylenediamine
9	101-77-9	4,4'-Methylenedianiline 4,4'-Diaminodiphenylmethane
10	91-94-1	3,3'-Dichlorobenzidine 3,3'-Dichlorobiphenyl-4,4'-ylenediamine
11	119-90-4	3,3'-Dimethoxybenzidine o-Dianisidine
12	119-93-7	3,3'-Dimethylbenzidine 4,4'-Bi-o-toluidine
13	838-88-0	4,4'-Methylenedi-o-toluidine
14	120-71-8	6-Methoxy-m-toluidine p-cresidine
15	101-14-4	4,4'-Methylene-bis-(2-chloro-aniline)
16	101-80-4	4,4'-Oxydianiline
17	139-65-1	4,4'-Thiodianiline
18	95-53-4	o-Toluidine 2-Aminotoluene
19	95-80-7	4-Methyl-m-phenylenediamine

20	137-17-7	2,4,5-Trimethylaniline
21	90-04-0	o-Anisidine 2-Methoxyaniline
22	60-09-3	4-Amino azobenzene
23	95-68-1	2,4-Dimethylaniline
24	87-62-7	2,6-Dimethylaniline (2,6-Xylidine)

Supplementary Table VII: Phthalates

No	CAS No	Substance name
1	131-11-3	Dimethyl phthalate
2	84-66-2	Diethyl phthalate
3	131-17-9	Diallyl phthalate
4	84-74-2	Dibutyl phthalate
5	84-69-5	Diisobutyl phthalate
6	84-75-3	Di-n-hexyl Phthalate
7	68515-50-4	Di(branched and linear hexyl) phthalate
8	117-81-7	Bis(2-ethylhexyl)phthalate)
9	117-84-0	Di-n-octyl phthalate
10	28553-12-0 68515-48-0	Diisononyl phthalate 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich
11	84-76-4	Dinonyl phthalate
12	26761-40-0 68515-49-1	Diisodecyl phthalate 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich
13	85-68-7	Bis(butylbenzyl) phthalate
14	117-82-8	Bis(2-methoxyethyl) phthalate
15	68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters
16	71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich
17	84-61-7 358731-25-6	Dicyclohexyl phthalate
18	84-77-5	Didecyl phthalate
19	120-61-6	Dimethyl terephthalate
20	3648-21-3	Diheptyl phthalate
21	84777-06-0 131-18-0	Dipentyl phthalate, branched and linear
22	605-50-5	Diisopentylphthalate
23	776267-69-9	N-pentyl-isopentylphthalate
24	68515-51-5 68648-93-1	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with >= 0.3% of dihexyl phthalate (EC No. 201-559-5)
25	89-19-0	Butyl decyl phthalate
26	84-62-8	Diphenyl phthalate
27	85-71-2	Methyl phthalyl ethyl glycolate (1,2-Benzenedicarboxylic acid, 1-(2-ethoxy-2-oxoethyl) 2-methyl ester)
28	17573-13-6	Diphenylguanidine phthalate
29	84-72-0	Ethyl phthalyl ethyl glycolate (Ethyl carbethoxymethyl phthalate)
30	85-70-1	Butyl phthalyl butyl glycolate (Butyl carbobutoxymethyl phthalate)

31	117-83-9	Di(butoxyethyl) phthalate (Bis(2-n-butoxyethyl) phthalate)
32	1322-94-7	Dimethylcyclohexyl phthalate
33	27554-26-3	Diisooctyl phthalate
34	84-78-6	Butyloctyl phthalate (n-butyl n-octyl phthalate)
35	84-71-9	Di(2-ethylhexyl) hexahydrophthalate
36	7493-81-4	Amyl decyl phthalate (n-amyl n-decyl phthalate)
37	119-07-3	Decyl octyl phthalate (Octyldecyl phthalate/n-octyl n-decyl phthalate)
38	21577-80-0	Dodecyl phthalate
39	26760-71-4	Dihydroabietyl phthalate
40	-	Castor oil phthalate, hydrogenated
41	68650-73-7	Castor oil phthalate with adipic acid and fumaric acid-diethylene glycol

Supplementary Table VIII: Allergens

27 specified raw materials, including the following allergenic substances, which are stipulated by the Cabinet Office regulations/notification, are included in the target.

Category	Substance name
Specified ingredients (7 items)	eggs, milk, wheat, buckwheat, peanuts, shrimp/prawns, crab
Itsems corresponding to specified ingredients	abalone, squid, salmon roe, organes, kiwi fruit, beef, walnuts, salmon, mackerel, soybeans, chicken, pork, matsutake mushrooms, peaches, yams, apples, gelatin, bananas, cashews, sesame seeds, almond