Material Composition Survey and Response Manual

[Survey and Response Format Ver4.3 compliant]

2013.09.10: Edition 1.1

Green Procurement (formerly JGPSSI) Survey Response Tools Ver4.31 Compliant

<JIG-101 Ed 4.1 and substance added to IEC62474 DB substance list D4.00 excerpted>

(Data Format Ver4.31compliant)

Published by the domestic VT62474 (JPNC)

Revision History:

2013.07.31: Edition 1 newly published due to compatibility with Green Procurement (formerly JGPSSI) Survey Response Tools Ver4.30

2013.09.10: Publication of Edition 1.1 due to an update associated with revision of substance group classification numbers (Compatible with Tools Ver4.31)

Major contents of update

- Since some of the substance group classification numbers that were set for the 28 substances that were added in Tools Ver4.30 were already used in the survey forms compatible with JIG-201 (packaging materials), all of the substance classification numbers for the 28 substances were discontinued, and new numbers were set.
- In association with the above, parts of Annex A-1, Annex A-2, Exhibits 5 and 6 (Intended Use Classification List), Exhibit 8 (JIG Detailed Substance Lists), and Exhibit 10 (Format for Handwritten Response) in this manual were revised.
- The above revisions were reflected and the version of the Survey Response Tools was updated to Ver4.31.

Table of Contents

Introduction

Publication of and background behind Green Procurement (formerly JGPSSI) Survey Response Tools Ver4.30:

The domestic VT (Validation Team) 62474 was established in April 2012 as a sectional committee within the IEC/TC111's domestic committee (JPNC: Japan National committee). As one of its activities, the team has started reviewing the development of XML-compatible tools that conform to IEC62474. However, as it is necessary to assess the contents of the IEC62474 guideline (description) document that is created by the IEC TC111 WG1 (international team) as well as the state of other reviews conducted within Japan (METI's research group/chemical substances information sharing WG that was inaugurated in May of this year), it is expected for further time to be required in the future for such reviews to be completed. At the same time, as it cannot be said that the substances subject to survey that were included in the old JGPSSI Tools Ver4.20 that was published in May 2012 were the latest, there have been requests from users for an upgraded version that supports the latest laws and regulations and that also has proactive IEC62474 compatibility in the future. Taking such conditions into consideration, the data format of the old JGPSSI was followed and the substances added in the revised edition (D4.00) of the substance list in the IEC62474 database (hereinafter referred to as IEC62474 DB) were added. Together with this, the Green Procurement (formerly JGPSSI) Survey Response Tools Ver4.30 (hereinafter referred to as Tools Ver4.30 or Survey Response Tools Ver4.30) in which usage classifications were revised to reflect a renewal of exemption items in the RoHS/ELV Directives was published on the Japanese VT62474 homepage in July 2013.

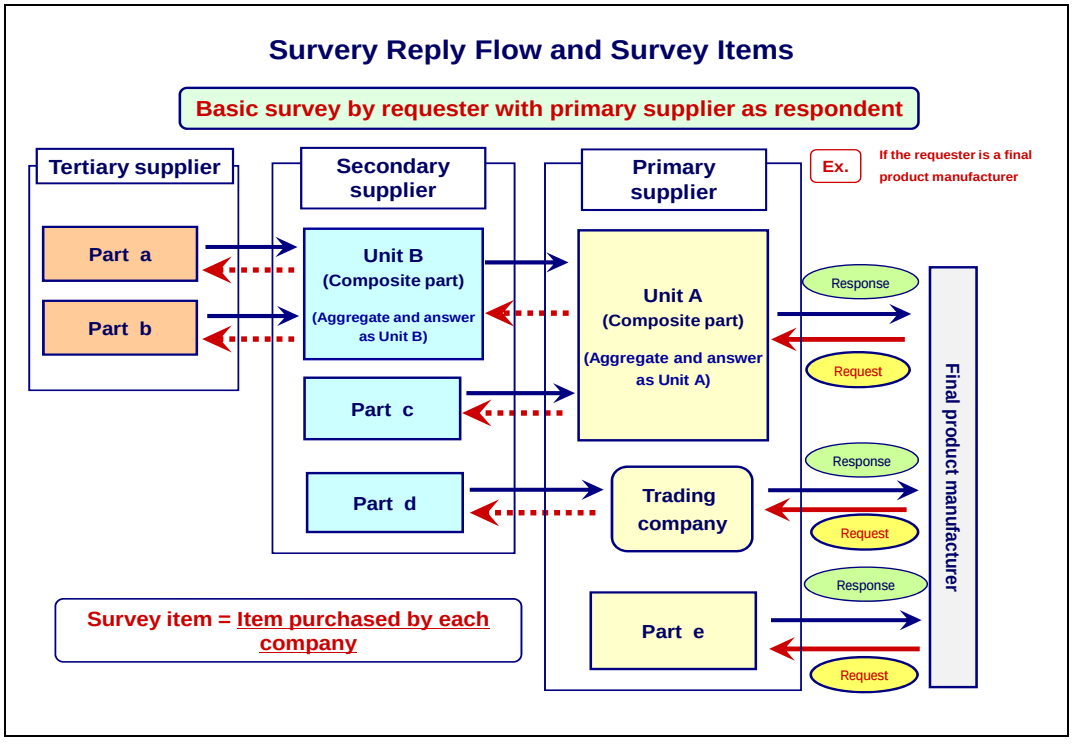
Precaution:

The substance groups and substances subject to survey that are integrated into Tools Ver4.31 are the same substance groups and substances in Table A of JIG-101 Ed4.1 that were subject to survey in the old Tools Ver4.20. Furthermore, in Ver4.31, the 28 substances <2 substances + 26 substances (SVHC)> that were added in D4.00 of the IEC62474 DB substance list are included (for details, see Annexes A-1 and A-2 in this manual).

1. Purpose

This Survey and Response Manual follows the old JGPSSI data format, and specifies guidelines related to the material composition survey and response methods based on Ver4.31 that reflects only reexaminations of usage classifications and addition of substances to the old Tools Ver4.20; this Manual explains each of the format items built into this Tool and how to answer each survey item

The material composition survey defined in this manual is designed for a requester to receive a response from the primary suppliers. Therefore, a survey is conducted on items that each requester purchases from the primary suppliers. As shown in the figure below, it is a premise that each responder conducts a similar survey by going back along the supply chain and that the information on material composition of products is accurately communicated from upstream suppliers (material manufacturers) to downstream suppliers (final product manufacturers) .



This survey is intended for companies to manage material composition of products and does not serve the following purposes:

(1) Proof of non-containing of certain chemical substances, assurance for compliance with applicable laws and regulations, and analysis requirements for assurance.
(2) Interpretation of laws and regulations.
(3) Provision of information to end-users upon making purchase decisions, etc.

With regard to information on how to handle conveyance of information on material composition as part of management of material composition of products, refer to “Guidelines for the Management of Chemical Substances in Products Version 2” published by the JGPSSI, or Version 3 published by JAMP.

2. Scope of Application

The survey established based on this manual is conducted on products, parts and materials that consist of electrical and electronic equipment (including accessories). The survey also covers batteries. It is not addressing:

(1) Packing materials used by a respondent to transport and store the product sold to the requester.
(2) Indirect components and sub-materials used in the manufacturing process that do not comprise products/parts.

3. Definition of Terms

(1) Product:
The item that the respondent is supplying to the electrotechnical industry (e.g., assembly, subassembly, component). The term “product” also covers a product family if the products within that family perform the same function and have consistent material declarations.

(2) Substance group:
A generic term for surveyed chemical elements and their compounds. See Annex A-1, Annex A-2 and Exhibit 8 (JIG Detailed Substance Lists)

(3) Intentionally added:
Deliberate use in the formulation of a product where its continued presence is desired to provide a specific characteristic, appearance or quality.

(4) Threshold level (Reporting Level):
Concentration level which defines the limit above which the presence of a substance or material contained in a product or subpart must be declared based on the requirements of this guide. A threshold level indicates an intentionally added threshold and/or a numerically set threshold (xx% ppm).

(5) Impurity:
Substance contained in a natural material that cannot be completely removed using industrial technology during the industrial refining process or a substance produced during a synthetic reaction process that cannot be completely removed using industrial technology. If a substance is used for the purpose of changing material properties, it should be indicated as “intentionally added.”

(6) Recycled materials:
Although there is no absolute definition of “recycling,” it is generally used to mean the “reuse or recycling of natural resources and waste” and “recycled materials” refer to materials that are to be reused or recycled.
Recycled materials are classified into “closed recycled materials” whose identity and chemical substances and other materials intentionally added to them are known and “open recycled materials” obtained from the market whose identity and inclusion of chemical substances are unknown.

(7) Material contamination:
A substance mixed in the material during the manufacturing process. Although contamination at less than the threshold level is tolerated, it is desirable to reduce it.

(8) Application area:
An area among the constituent components of parts that contains surveyed chemical substances.

(9) Purpose of use/intended use:
Performance and functions intended to be enhanced by adding chemical substances to a product or subpart.

(10) Homogeneous material:
A material that cannot be mechanically disjointed into different materials.
The term “homogeneous” means “of uniform composition throughout.” Examples of “homogeneous materials” are individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.

(11) Mechanically disjointed:
The term “mechanically disjointed” means that the materials can, in principle, be separated by mechanical actions such as: unscrewing, cutting, crushing, grinding and abrasive processes.

4. Response Format

This manual is written for the Survey and Response Format Ver4.3. However, the response format is for responses on the substance group level and succeeds the standard concept from the former Survey and Response Format Ver.3. Content information regarding SVHC that are covered by REACH (refer to 5. (5) Information on specific substances contained) are of a format where responses for SVHC are made on a CAS number level based on the newly established substance unit line (Refer to Exhibit 9. Data Format).

Note) In the Survey and Response Format Ver4.3 (Data Format Ver4.31), changes have not been made to survey items (data items) from Survey and Response Format Ver.4.

5. Survey Items (Input method for each item)

(1) Requester information: (Level 1 of Survey Response Tools)

1) Reference number:
Used by a requester to manage a survey by survey file, and is entered by the requester.

2) Requester’s date of data entry:
Enter the date of survey request by the requester. The date format is year/month/day (YYYY/MM/DD).

3) Company name:
Information on the requester.

4) DUNS number:
Information on the requester.
(Note) DUNS number is a nine-digit company identification code issued by D&B.

5) Division name:
Information on the requester.

6) Contact name:
Information on the requester.

7) Telephone number (contact information):
Information on the requester.

8) Fax number:
Information on the requester.

9) E-mail address:
Information on the requester.

10) Requester's management items 1-3:
Additional information on requester should be entered here. These items are used based on the requester's settings. Do not use these items for any other purposes. (Ex: section code, factory code)

11) Remarks by requester:
Enter the requester's notes or comments at the input of a response. Do not misuse this field for requesting guarantees or listing additional requirements

(2) Respondent information: (Level 1 of Survey Response Tools)
In principle, enter your information according to the instructions below. If any instructions are given from the requester, however, follow them.

1) Respondent's date of data entry:
Enter the date of response. This field is required.

2) Company name:
Enter respondent's company name. This field is required.
If the respondent is a trading company, enter the information as a trading company instead of a manufacturer.

3) DUNS number: DUNS:
Leave it blank if it is unknown.

4) Address:
Input the respondent's address.

5) Division name:
Enter respondent's division name.

6) Contact name:
Enter the name of the person in charge of reporting the survey data. This field is required.

7) Telephone number: This field is required.
Enter the telephone number of the person indicated in item 6) or the person in charge of inquiries regarding the survey data.

8) Fax number:
Enter the fax number of the person indicated in item 6) or the person in charge of inquiries regarding the survey data.

9) E-mail address:
Enter the e-mail address of the person indicated in item 6) or the person in charge of inquiries regarding the survey data.

10) Requester's management items 4-6:
These items are set and used by the requester to manage the information on the respondent. Do not use these items for any other purposes. (Ex: supplier's name, supplier's code)

11) Additional information regarding survey response:
This includes overall comments on survey responses (and is entered by the respondent).

(3) Product/subpart/material information: (Level 1 of Survey Response Tools)

1) Product/subpart number of requester: This field is required (only when there is no data in 3) Material identification information below).
The product/subpart management number used by the requester. In principle, it is entered by the requester.

2) Product/subpart/material name of requester:
The product/subpart/material name the requester uses for the surveyed items. In principle, it is entered by the requester.

3) Material identification information:
This information is used when the requester intends a survey on such materials as metals or resins but the materials do not have product/subpart numbers of 1) above. Based on this information, the respondent can identify surveyed materials. In principle, this is entered by the requester.

3)-1 Material grade number:
The grade number identifying materials should be entered here. It is mainly used for resins and related materials.

3)-2 Metal/JIS symbols:
Metal symbols identifying metals or metal symbols specified by JIS should be entered here. These symbols are used primarily for metal materials.

3)-3 Coloring number:
The coloring number identifies the color of a material. This number is equivalent to a number managed by the material manufacturer or the colorant company. It is used primarily for resins and related materials.

3)-4 Thickness (mm):
This information identifies the thickness of a material. The unit is measured in mm. It is mainly used for flat materials (e.g. metal steel plates, sheet materials).

3)-5 Color:
This is used when the coloring number in the above item 3)-3 is not available and the information on material color can be identified by letters.

3)-6 Diameter (mm):
This information identifies the diameter of a material. The unit is measured in mm. It is primarily used for cylindrical materials.

4) Requester's items 1-3:
In principle, these items are entered by the requester to identify and manage the surveyed items.
(Note) This is the data field used for data management. Do not use it for individual survey. Respondents should not enter these items.

5) Manufacturer name:
Enter the name of the manufacturer of the survey items. This field is required.

6) Respondent's product/subpart/material number: This field is required.
This number identifies respondent's product/subpart/material. In principle, it is entered by the respondent.

7) Respondent's product/subpart/material name:
A product provided or to be provided by the respondent. In principle, it is entered by the respondent.

8) Respondent's items 1-3:
Respondent's items 1-3 are used by the respondent (respondent's memo).

9) Data version:
Enter the management number that identifies the version of the survey response data used by the respondent. Keep it blank if it is not applicable.

10) Revision date:
Enter the date when you respond data or finalize the data of the version responded at 9) above.

11) Survey unit: This field is required.
Choose the unit of the survey item when reporting its content. If the survey unit is specified by the requester, follow the requester's instructions.
e.g.) In the case of a subpart, “piece” is used in principle. For raw materials, choose the most appropriate unit from “g”, “kg”, “mm”, “m”, “cm2”, “m2”,”cc”, “liter” or “m3”.

12) Survey unit mass (g/survey unit): This field is required.
Enter the total mass per surveyed unit chosen in item 11).
e.g.) If the survey unit is "piece" → Mass per piece of survey item
If the survey unit is “kg” → Mass per 1kg of surveyed item = 1000g

Attention: Relationship between "survey unit" and "survey unit mass"
For a subpart, the content per piece is usually answered.. Therefore, specify "piece" and enter its mass in "survey unit mass." If the unit is kg as for substance, specify "kg" and enter "1000" (g) in "survey unit mass." For a wire, specify "m" or a similar unit of length and enter the mass per meter in "survey unit mass." For materials in a vessel, either specify "piece" and enter the mass per vessel or specify "g" and enter "1" (g).

13) Overall content flag: This field is required.
Input Y when one or more content flag out of all substance groups is Y. Input N when all of content flags are N.

(The Survey and Response Tool Ver4.31 automatically displays Overall content flag.)

(4) Substance group information:

(How to input for each surveyed item for containedsubstance groups [Other than SVHCs])
(Level 2 of Survey Response Tools)

(Note 1) This survey is not to receive chemical substance information about each subpart individually that forms the surveyed product. Its intention is to receive integrated (totaled) chemical substance information about the surveyed product.

(Note 2): The items subject to survey and response in this chapter (4) are the substances in Annex A-1 of "9. Attachments" in this manual (hereinafter, Annex A-1). Make sure to confirm which substances are covered by the respective substance groups by referring to the JIG Detailed Substance Lists (Exhibit 8). In addition, the items related to SVHC covered by REACH that are subject to survey and response are the substances in Annex A-2. For details, refer to Chapter 5. (5).

(Note 3) The reporting of azocolourants and azodyes, formaldehyde, and nickel is only required for specific applications. For details, see Annex A-1, "Reportable Application."

(Note 4) The reporting of the content flag by threshold level and total content related to "B08 (Brominated flame retardants)," "B18 (Chlorinated flame retardants)," and "B19 (Polyvinyl chloride (PVC) and PVC copolymers)" in Annex A-1 is fundamentally based on the standard of the mass of contained bromine or chlorine. However, if it is difficult to obtain bromine or chlorine conversion data, it is possible to report the content flag by threshold level and total content using the content where bromine or chlorine is not converted (mass of the compound) as a standard.

<table>
<tr><th>Substance group Information
(Each survey item)</th><th>How To Answer Each Survey Item</th></tr>
<tr><td>1) Content flag by threshold level (Y/N)

(Required for all substance groups)</td><td>
(1) Answer Y or N for each substance group in Annex A-1 dependent if the substance exceeds the threshold level or not.
(2) The threshold level (Reporting Level) is set in Annex A-1 for each substance group (Annex A-1 and A-2 handles even a single substance as a substance group.)
(3) If the reporting product belongs to " Reportable Application " specified in Annex A-1, the corresponding threshold level in " Reportable Application " applies. If " Reportable Application " is set for specific products and parts only and the product to be reported does not belong to " Reportable Application," the content flag is N irrespective of the amount of content.

Note 1) For each substance group, refer to the following when judging the relationship between "Reportable Application" and content flag (Y/N) in cases involving products and composite components that include parts with "Reportable Application," such as batteries. The items that are subject to judgment regarding "Reportable Application" are products supplied by the surveyed company (survey items). (Refer to Exhibit 1. Content Judgment Flow 1)
<table>
<tr><th>Does the supplied product (survey item) correspond to "Reportable Application"?</th><th>Does the content of the applicable substance exceed the threshold level?</th><th>Content flag (Y/N) of applicable substance group</th></tr>
<tr><td rowspan="2">Yes (Refer to Note 2 below)</td><td>Yes</td><td>Y</td></tr>
<tr><td>No</td><td>N</td></tr>
<tr><td rowspan="2">No</td><td>Yes</td><td>N</td></tr>
<tr><td>No</td><td>N</td></tr>
<tr><td rowspan="2">Cannot be determined (Refer to Note 3 below)</td><td>Yes</td><td>Y</td></tr>
<tr><td>No</td><td>N</td></tr>
</table>
Note 2): Cases in which a product or part of "Reportable Application" is incorporated into the product supplied by the surveyed company are applicable. Example: Composite components, units or products in which a battery or a plastic material is included (Refer to response examples 1 in Exhibit 3)

Note 3): When it cannot be judged whether a product supplied by the surveyed company corresponds to a reportable application for the product of the surveying company, rate the content flag as Y by assuming that it contains the applicable substance.

The following are substances groups for which it is particularly difficult to determine whether they correspond to a reportable application.
For responses regarding these substance groups, refer to 3) (1) Note 2 as mentioned below.
</td></tr>
</table>

Substance group Information (Each survey item)	How To Answer Each Survey Item
1) Content flag by threshold level (Y/N) (Required for all substance groups) (Continued)	A11: Nickel A24: Dioctyltin (DOT) compounds B08: Brominated flame retardants (other than PBBs,PBDEs, or HBCDD) C02: Azocolourants and azodyes which form certain aromatic amines C09: Selected Phthalates Group 1 (BBP, DBP, DEHP) C10: Selected Phthalates Group 2 (DIDP, DINP, DNOP) Note 4): The purpose of Note 1, Note 2 and Note 3 above is to further clarify the rating standards for content flag (Y/N), and fundamentally do not represent a change in past rating standards (JIG-101 Ed 2.0). (4) If several " Reportable Applications" and threshold levels exist for the same substance group, the content flag is Y for this substance group if for any of the reportable applications the respective threshold is exceeded (e.g. Lead and its compounds) (5) Even if the intended use of a substance/substance group is exempted from a legislation e.g from the RoHS directive, the content flag Y/N is purely based on the decision whether the corresponding threshold level is exceeded or not. (Provision of information as to whether an item is exempted is carried out in selection of 3) Intended use classification as mentioned below.) (6) When a threshold level is set for "intentionally added" only, the content flag is Y if there is a substance intentionally added, irrespective of the amount of content, but N if there is no such a substance. (7) When the threshold level is set for "numeric value% (ppm)," the content flag is Y if the concentration is over the corresponding value whether the substance is intentionally added or irrespective of any other reason. Note that the denominator in the concentration calculation formula may differ depending on the threshold level. (See Annex A-1.) Note) "Other reasons" refer to cases where materials/substances are not intentionally added but where they derived from impurities in natural resources, residuals of manufacturing processes, contamination or use of recycled materials. (8) Refer to Exhibit 2. Content Judgment Flow 2. with regard to the method for content flags in cases where the threshold level is set based on the intentionally added threshold and numerically set threshold (xx% ppm). (Cases involving tributyl tin oxide (TBTO) and mercury other than batteries.) Note): However, for content flag (Y/N) of A17: Tributyl Tin Oxide (TBTO) as a substance group, the threshold level is “Intentionally added” only. (9) In calculations of the threshold level of C09: Selected Phthalates Group 1 (BBP, DBP, DEHP) and C10: Selected Phthalates Group (DINP, DIDP, DNOP) in Annex A-1, the total value of the content of the three substances in each of the groups serves as the standard. (10) The following 2) – 7) needs to be answered for all substance groups if the content flag is Y. (11) In case that the content flag is rated as N, but the content is known enter necessary information into 2) - 7) in the same way as when the content flag is Y. The intention of this is avoid an interruption of the information flow in the supply chain. By providing this information a re-survey can be avoided. Note) For the intended use classification to select when the content flag is N, refer to 3) (4) Note) as mentioned below.

Substance group Information (Each survey item)	How To Answer Each Survey Item
2) Total content (mg) (Required for all substance groups if content flag is Y)	(1) Enter in mg and two significant digits (round the third digit) the content of chemical substances per survey unit as set by 11) in "(3) "Product/subpart/material information." Note) See "Attention: Relationship between survey unit and survey unit mass at 12) in (3). (2) The known maximum content should be entered, in principle. (3) If the substance group is a metal/metal compound or a metal compound, the total content is based on the following : i. Substance group with CAS number in Annex A-1: the mass of the metal compound . ii. Substance group with no CAS number in Annex A-1: the mass of the pure metal = (mass of the metal compound multiplied by the metal conversion factors). (See Exhibit 8 "JIG Detailed Chemical Lists.") Note1) If each category is a metal and its compounds, the maximum content rate in homogeneous material of 6) below is based on the metal compound mass multiplied by the respective metal conversion. Note 2): Although a CAS number is listed for A17: Tributyl Tin Oxide (TBTO) in Annex A-1, it may be applicable to A28: Tri-substituted organostannic compounds. If calculating the content of TBTO as tri-substituted organostannic compounds, metal conversion is necessary. (See Exhibit 8)
3) Intended use classification (Required for all substance groups if content flag is Y)	(1) Select an applicable intended use classification code from the list. If there are several application areas, select all applicable intended use classification codes from the list. Note1): For each intended use classification, corresponding items are assigned based on whether the content flag is Y or N. Select the intended use classification that is consistent with the content flag (Y/N). (Refer to the intended use classification lists and corresponding content flags (Y/N) in Exhibit 4 and Exhibit 5) Note 2): For some substance groups, intended use classifications codes that are selected when it is difficult to judge whether a product supplied by the surveyed company corresponds to a reportable application for the product of the surveying company are set. Ni-J-2: Nickel A24-J-1: Dioctyltin (DOT) compounds B08-J-4: Brominated flame retardants (other than PBBs,PBDEs, or HBCDD) C02-J-3: Azocolourants and azodyes which form certain aromatic amines C09-J-2: Selected Phthalates Group 1 (BBP, DBP, DEHP) C10-J-1: Selected Phthalates Group 2 (DIDP, DINP, DNOP) (2) If exemption defined in the RoHS or ELV Directive applies to the content, select the corresponding intended use classification code. (e.g. Cd-R-2 signifies exemption in the RoHS Directive and Pb-RE-2 signifies exemption common to the RoHS Directive and the ELV Directive. For details, see Exhibit 4.) Note 1): If the content corresponds to an exemption in the ELV Directive (lead in high-melting point solder), select Pb-R-2, since an exclusive intended use classification code has not been established. Note 2): If the content corresponds to an exemption in the ELV Directive (aluminum materials containing 0.4% or less of lead by weight), select Pb-R-1, since likewise, an exclusive intended use classification code has not been established. Note 3): For intended use classification codes (Hg-R-○) for A10: Mercury/mercury compounds, please refer to Note 2) in Exhibit 4.

Substance group Information (Each survey item)	How To Answer Each Survey Item
3) Intended use classification (Required for all substance groups if content flag is Y) (Continued)	Note 4): "Specific use," which is included in the descriptions for some intended use classifications, refers to exemptions in the RoHS Directive and ELV Directive. In addition, Pb-J-1 (wires, cords) and Pb-B-1 (batteries) also signify specific use. (3) When appropriate intended use classification is not listed, select "content not for specific use" as Cd-J-0, then enter details at 7) "Additional information on material composition of products." (4) When the content flag is N and further information will be voluntarily provided, make sure to select the corresponding intended use classification code. Note): Depending on the intended use classification, there is no code that corresponds to when the content flag is N. in such a case, select the intended use classification that corresponds to when the content flag for the substance group is N, and write down an explanation in the field for additional information. e.g.: With regard to the intended use classification to be selected when the content flag for Pb-J-1 (wires, cords) and Pb-B-1 (batteries) is Y (exceeding the threshold level), there is no intended use classification that corresponds to when the content flag is N individually set. In such a case, select Pb-RE-98, for which the content flag corresponds to N.
4) Purpose of intended use (Required for all substance groups if content flag is Y)	(1) Briefly explain the purpose of using chemical substance. Ex. 1: Stabilizer, plasticizer, colorant, flame retardant, anti-rust agent, soldering Ex. 2: Main constituent, to increase thermostability, to enhance electric properties, to improve mechanical properties Note) For substance groups covered by REACH (see Note 4 Annex A), "purpose of intended use" needs to be filled out following "5.3. information on specific substances contained "
5) Application area (Required for all substance groups if content flag is Y)	(1) An application area refers to an area among the constituent components of parts that contains surveyed chemical substances. The name of the application area should be a generic name that is used in specifications and drawings or used by vendors. (2) If the same chemical substance is contained in several application areas, enter major application areas only. If this is the case, indicate "etc." at the end. (3) If the survey item is a single electronic subpart or other product, the application area should be indicated in the drawing, material composition list, etc. of the subpart. (See Exhibit 7.) Examples 1) to 3) are shown below. Ex. 1) Ceramic materials and internal and external electrode materials in the laminated ceramic capacitor Ex. 2) Lead wire, electrolytic solution, sealant, and electrode foil in the electrolytic Capacitor Ex. 3) Rubber contact point, spring and plastic cover in the switch (4) If the survey item is a device/equipment or electronic assembly subpart, the application area should be indicated in the drawing, parts list, etc. of this device or equipment e.g.) Laminated ceramic capacitor, electrolytic capacitor, printed circuit board, assembling solder Note) For substance groups covered by REACH (see Note 4 Annex A), "Application area" needs to be filled out following "5.3. information on specific substances contained "

Substance group Information (Each survey item)	How To Answer Each Survey Item
6) Maximum content rate of homogeneous material (ppm) (Required for specific substance groups only if content flag is Y)	(1) Enter the content rate (ppm) of each substance group in a homogeneous material where the substances are contained. (2) If there is a substance of the same intended use classification code used in several areas (=different homogenous materials), enter the maximum value (ppm). (3) If the content flag is Y, a response about this item is required for the following twelve groups but optional for others. ・A05: Cadmium/cadmium compounds (excludes batteries) ・A07: Chromium VI compounds ・A09: Lead/lead compounds (excludes batteries) ・A10: Mercury/mercury compounds (excludes batteries) ・A28: Tri-substiituted organostannic compounds ・A23: Dibutyltin (DBT) compounds ・A24: Dioctyltin (DOT) compounds ・B02: Polybrominated Biphenyls (PBBs) ・B03: Polybrominated Diphenylethers (PBDEs) ・B13: Perfluorooctane sulfonate (PFOS) ・C09: Selected Phthalates Group 1 (BBP, DBP, DEHP) ・C10: Selected Phthalates Group 2 (DIDP, DINP, DNOP)
7) Additional information on materials/substances (Optional)	(1) Enter additional information on material/substances if any. e.g.) - CAS No. and ISO No. of materials/substances - Alternative plans, reduction plans - Information on radioactivity must be reported. For example, radioactivity isotope name and code, max activity level (MBq), and typical activity level (MBq).

(5) Substance Information: (How to input at the CAS number level in relation to SVHC corresponding to REACH) (Level 3 of Survey Response Tools)

(Note 1): Refer to Annex A-2 for the list of applicable SVHC covered by REACH.
SVHC is short for “substance of very high concern.”

(Note 2): SVHCs in Annex A-2 may also correspond to detailed substances of substance groups in Annex A-1 (Exhibit 8. JIG Detailed Substance Lists). In such cases, please note that the applicable SVHCs are also subject to survey and response at the substance group level in “5. (4) Substance Information.” For compounds that are applicable to the substance groups in Annex A-1, the calculation denominator for the threshold level differs, even if it is the same SVHC.

Example 1): Lead chromate (CAS No. 7758-97-6) is subject to survey responses for the substance group classification No. A07: Chromium VI compounds and A09: Lead/lead compounds in Annex A-1, and the calculation denominator for the threshold level is homogeneous materials. (Refer to Exhibit 3 Response Example 3)

Example 2): Each of the phthalates (BBP, DBP, DEHP) that are SVHCs are also subject to response for C09: Phthalates Group 1 (BBP, DBP, DEHP). (Refer to Exhibit 3 Response Example 4))

Substance Information (Each survey item)	How To Answer Each Survey Item
1) Content flag by threshold level (Y/N)	(1) Enter Y or N for each SVHC as to whether the ratio by weight per survey unit exceeds 0.1%. If it exceeds 0.1%, enter Y; if it does not, enter N. Note 1): The “Reportable Application” of SVHC is “All.” For the content flag, make ratings based only on the threshold level. Note 2): As with other SVHC, the threshold level for A17: Tributyl Tin Oxide (TBTO) in Annex A-2 is judged based on whether the ratio by weight per survey unit exceeds 0.1%. Note 3): Some SVHC might not have a corresponding CAS number. For detailed information on these SVHC, refer to Exhibit 8. JIG Detailed Substance Lists. (Example: Refractory ceramic fiber as in substance group classification numbers C16 and C17) (2) For SVHC with a flag content of Y, enter the necessary items related to content information into 2) to 6) below. (3) Even when the content flag is rated as N, when the content is known, enter the necessary information into 2) to 6) in the same way as when the content flag is Y. The intention of this is to avoid an interruption of the information flow in the supply chain. By providing this information, a re-survey can be avoided.
2) Content of compound per survey unit (mg) (Response required when the content flag for each SVHC is Y)	(1) Enter in mg and two significant digits (round the third digit) the content of compound of the CAS number per survey unit. (Enter the content even for SVHCs with no CAS number.) Note 1) Even for a metal compound, enter its content without metal conversion. <See Note) in Exhibit 8.> Note 2): Do not carry out metal conversion for the content of A17: Tributyl Tin Oxide (TBTO) in Annex A-2.
3) Purpose of intended use (Response required when the content flag for each SVHC is Y)	(1) Briefly explain the purpose of using chemical substances of the intended CAS number in the "intended use" column. (Enter the content even for SVHCs with no CAS number.) Ex.1) Stabilizer, plasticizer, colorant, flame retardant, anti-rust agent, soldering Ex.2) Main constituent, to increase thermostability, to enhance electric properties, to improve mechanical properties

Substance Information (Each survey item)	How To Answer Each Survey Item
4) Application area (Response required when the content flag for each SVHC is Y)	(1) Enter application areas where the compound of the CAS number is contained. The name of the application area should be a generic name that is used in specifications and drawings or used by vendors. (Enter the content even for SVHCs with no CAS number.) (2) If the same chemical substance is contained in several application areas, enter major application areas only. If this is the case, indicate "etc." at the end. (3) If the survey item is a single electronic subpart or other product, the application area should be indicated in the drawing, material composition list, etc. of the subpart. (See Exhibit 7.) (5) If the survey item is a device/equipment or electronic assembly subpart, the application area should be indicated in the drawing, parts list, etc. of this device or equipment (4) e.g.) Laminated ceramic capacitor, electrolytic capacitor, printed circuit board, assembling solder
5) Weight concentration per survey unit (%) (Response required when the content flag for each SVHC is Y)	(1) Enter the weight concentration of compound of the CAS number per survey unit in %. Formula = <(Content mg x 10^{-3})÷ Survey unit mass g> x 100 (Enter the content even for SVHCs with no CAS number.) (The Survey Response Tool Ver4.31 automatically calculates weigh concentration.)
6) Additional information on substances (Optional)	(1) Enter additional information on the content of the chemical substance of the CAS number if any. (Enter the content even for SVHCs with no CAS number.)

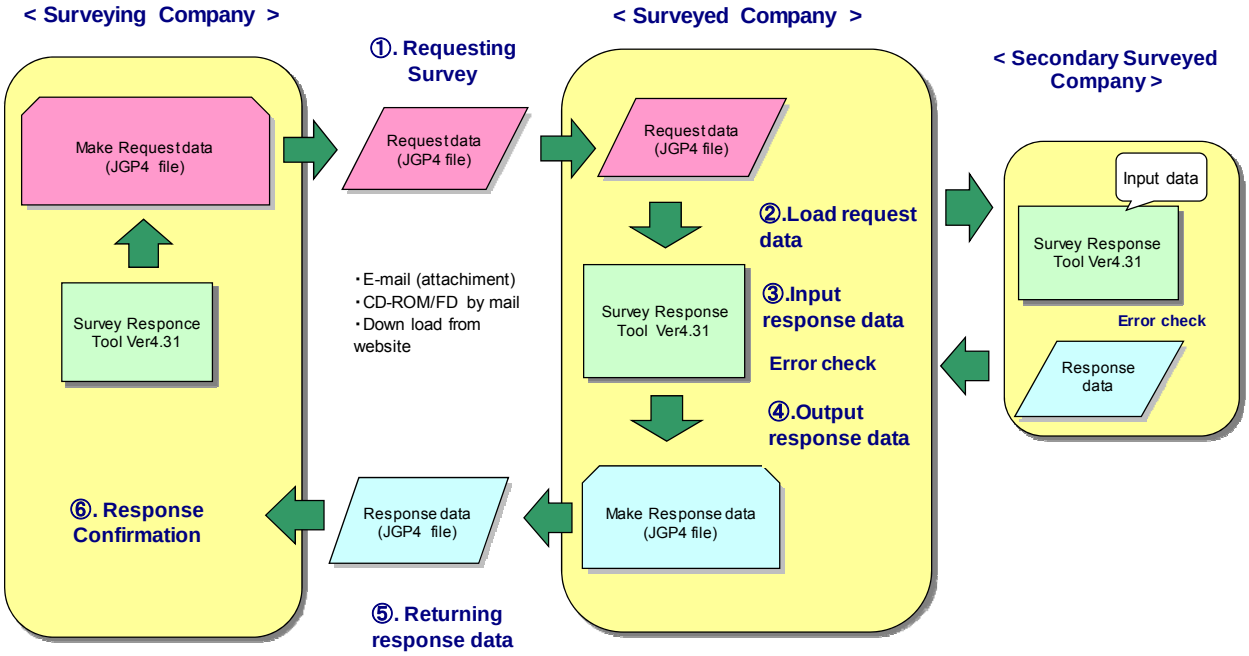
6. Response Methods and Survey Response Format (Data Format)

In the old JGPSSI, rules were formed regarding conditions for arranging the data, etc. at the time of response, and these were specified as Survey and Response Format Ver.4 (Data Format Ver.4) that supports JIG-101. Tools Ver4.31, to which this manual is applicable, also follows this format and was developed based on Data Format Ver4.31 in Exhibit 1. Refer also to Exhibit 9. for information on version management rules for Data Format. In principle, all survey responses should be exchanged via electronic data (JGP4 file) based on the survey response format (data format). We also provide free software of survey response tools Ver4.31 that help respondents create JGP4 file in accordance with our survey response format (data format). It is acceptable to reply to a survey by creating JGP4 file without using the survey response tool.
Please see “Survey Response Tool Ver4.31 Operation Manual” for how to create response data using the survey response tool.

7. Formats for Handwritten Response

As explained in section 6 above, while in principle the survey response favors the exchange of JGP files, this manual also provides formats for handwritten response (see Exhibits 10). This format is an alternative for those who are unable to utilize the electronic formats (JGP file). Exhibits 10 may be copied and used when making a handwritten response.
For handwritten response, circle the applicable content flag (Y/N). For "Intended use classification," "Purpose of intended use," "Application area," "Content rate," and "Additional information on materials/substances," fill in the corresponding fields of "Contained substance group - Detailed information" on the second hierarchical level (Level 2). For the content information of SVHCs to REACH on the CAS number level, fill in the corresponding fields of "Contained substance - Detailed information" on the third hierarchical level (Level 3).
For how to use and fill out this format, please follow the instructions in this manual. Note that the formats for handwritten response are only provided in PDF form as shown in this manual’s exhibits. Please do not change the survey items.

8. Operation Flow



Note: Preparing response data without using the survey tool is permitted.

9. Attachments

Annex A-1: Surveyed substance group List (Excerpted from JIG-101 Ed 4.1 Annex A tables and part of IEC62474 DB declarable substance list)

Note 1) This Annex A-1 lists only substance groups that are applicable in "5. (4) Substance group information" of this Manual, and represent substance groups for which responses are made in Level 2 in the Survey Response Tools Ver4.31.
Similarly, the SVHC covered by REACH for which responses are made in Level 3 are listed in Annex A-2.

Note 2) The order in which the substance groups are listed is the same as in Survey and Response Tool Ver4.31, and differ from the alphabetical order of JIG-101.

Note 3) "Criteria" in this table is taken from JIG-101 Ed 4.1.

Note 4) Each of the substance group classification numbers were uniquely established in the old JGPSSI. New numbers have been set for the substances (including in Annex A-2) added to the latest version (D4.00) of the IEC62474 DB substance list (Changes made to Annex A-1 are indicated with an underline (two substances added)). A substance group classification number of A xx (Ex: A09) represents a metallic compound, B xx (Ex: B08) represents a halogenated organic compound, and C xx (Ex: C909) represents other compounds.

Note 5) Please note that the threshold level for A17: Tributyl Tin Oxide (TBTO) in this Annex differs from the threshold level of A17.

Note 6) For calculation of the threshold levels for C09: Phthalates Group 1 (BBP, DBP, DEHP) and C10: Phthalates Group 2 (DIDP, DINP, DNOP) in this Annex, the total value of the content of the three substances in each group serves as the standards.

Criteria	Substance group classification No.	Substance groups	Reportable Application(s)	Threshold Level (Reporting level)
R	A05	Cadmium/cadmium compounds	All, except batteries	0.01% by weight (100 ppm) of homogeneous materials
R	A05	Cadmium/cadmium compounds	Batteries	0.001% by weight (10 ppm) of battery
R	A07	Chromium VI compounds	All	0.1% by weight (1000ppm) of homogeneous materials
R	A09	Lead/lead compounds	All, except as noted below	0.1% by weight (1000 ppm) of homogeneous materials
R	A09	Lead/lead compounds	Consumer products designed or intended primarily for children 12 years of age or younger.	0.01% by weight (100 ppm) of children's product
R	A09	Lead/lead compounds	Paint and similar surface coatings of toys and other articles intended for use by children	0.009% by weight of surface coating
R	A09	Lead/lead compounds	Cables/cords with thermoset or thermoplastic coatings	0.03% by weight (300 ppm) of surface coating
R	A09	Lead/lead compounds	Batteries	0.004% by weight (40 ppm) of battery
R	A10	Mercury/mercury compounds	All, except batteries	Intentionally added or 0.1% (1,000 ppm) at homogeneous material (See Exhibit 2. Content Judgment Flow)
R	A10	Mercury/mercury compounds	Batteries	Intentionally added or 0.0001% by weight (1 ppm) of battery
R	A11	Nickel	All, where prolonged skin contact is expected	Intentionally added
R	A17	Tributyl Tin Oxide (TBTO) (CAS No. 56-35-9)	All	Intentionally added
R	A28	Tri-substiituted organostannic compounds	All	Intentionally added or 0.1% by weight (1 000 ppm) of tin in a material

Criteria	Substance group classification No.	Substance groups	Reportable Application(s)	Threshold Level (Reporting level)
R	A23	Dibutyltin (DBT) compounds	All	0.1% by weight (1 000 ppm) of tin in a material
R	A24	Dioctyltin (DOT) compounds	(a) textile and leather articles intended to come into contact with the skin, (b) childcare articles (c) two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits)	0.1% by weight (1 000 ppm) of tin in a material
I	A19	Beryllium Oxide (BeO) (CAS No. 1304-56-9)	All	0.1 % by weight (1,000 ppm) of the product
R	B02	Polybrominated Biphenyls (PBBs)	All	0.1% by weight (1000 ppm) of homogeneous materials
R	B03	Polybrominated Diphenylethers (PBDEs)	All	Intentionally added or 0.1% by weight (1000 ppm) of homogeneous materials
I	B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD)	Plastic materials except printed wiring board laminates	0.1% total bromine content by weight (1 000 ppm) in the plastic material
I	B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD)	Printed wiring board laminates	0.09% total bromine content by weight (900 ppm) in the laminate
I	B18	Chlorinated flame retardants	Plastic materials except printed wiring board laminates	0.1% total chlorine content by weight (1 000 ppm) in the plastic material
I	B18	Chlorinated flame retardants	Printed wiring board laminates	0.09% total chlorine content by weight (900 ppm) in the laminate
R	B05	Polychlorinated Biphenyls (PCBs) and specific substitutes	All	Intentionally added
R	B15	Polychlorinated Terphenyls (PCTs)	All	0.005% by weight (50 ppm) in material
R	B06	Polychlorinated Naphthalenes (more than 3 chlorine atoms)	All	Intentionally added
R	B12	Perchlorates	All	0.0000006 % by weight (0.006 ppm) of the product
R	B13	Perfluorooctane sulfonate (PFOS)	All	Intentionally added or 0.1% by weight (1000 ppm) in material
R	B10	Fluorinated greenhouse gases (PFC, SF_6, HFC)	All	Intentionally added
I	B19	Polyvinyl chloride (PVC) & PVC Copolymers	Plastic materials except printed wiring board laminates	0.1% total chlorine content by weight (1 000 ppm) in the plastic material
R	C01	Asbestos	All	Intentionally added
R	C02	Azocolourants and azodyes which form certain aromatic amines	Textiles and leather	0.003% by weight (30 ppm) of the finished textile/leather product
R	C04	Ozone Depleting Substances	All	Intentionally added
R	C06	Radioactive substances	All	Intentionally added
R	C07	Formaldehyde	Textiles	0.0075%by weight (75 ppm) of textile product
R	C07	Formaldehyde	Composite wood (plywood, particle board, MDF) products or Components	Intentionally added

Criteria	Substance group classification No.	Substance groups	Reportable Application(s)	Threshold Level (Reporting level)
R	C08	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl) (CAS No. 3846-71-7)	All	Intentionally added
R	C09	Selected Phthalates Group 1 (BBP, DBP, DEHP)	Children's toy or child care article	0.1% by weight (1 000 ppm) in plasticized material
R	C10	Selected Phthalates Group 2 (DIDP, DINP, DNOP)	Children's toy or child care article that can be placed in a child's mouth	0.1% by weight (1 000 ppm) in plasticized material
R	C11	Dimethyl fumarate (CAS# 624-49-7)	All	0.00001% by weight (0.1 ppm) in a material
R	C47	Di-isodecyl phthalate (DIDP)	All	Intentionally added
R	C48	Di-n-hexyl Phthalate (DnHP)	All	Intentionally added

Note 7) C47 and C48 (phthalate esters) in the above substance group classifications are substances that were added to the IEC62474 DB substance list (Version D4.00) in June 2013. Proposition 65 (warning label requirements) of the State of California in the United States is excerpted, and intended uses include cable plasticizer, etc.

Annex A-2. List of SVHCs Covered by REACH (Excerpted from JIG-101 Ed 4.1 Annex A tables and part of IEC62474 DB declarable substance list)

Note 1) This Annex lists only SVHCs that are substance groups that are applicable in "5. (4) Substance group information" of this Manual, and represent substance name for which reponses are made in Level 3 in the Survey Response Tools Ver4.31.
(Substances that were added to Tools Ver4.20 (26 substances) are indicated with an underline.) These 26 substances were selected based on the results of a screening by VT62474's validation team (international) of SVHCs (total of 67 substances) published by the ECHA in June and December of 2012.

Note 2) The "Reportable Application" of SVHCs in this Annex is "All."
Note 3) The threshold level is 0.1% by weight (1,000 ppm) of the product.
Note 4) As with other SVHCs, the threshold level of A17: Tributyl Tin Oxide (TBTO) in this Annex is 0.1% by weight (1,000 ppm) of the product.

Criteria	Substance group classification No.	Substance groups (SVHC)	CAS #	Substance name
R	A17	Tributyl Tin Oxide (TBTO)	56-35-9	Tributyl Tin Oxide (TBTO)
R	A20	Diarsenic Pentoxide	1303-28-2	Diarsenic Pentoxide
R	A21	Diarsenic Trioxide	1327-53-3	Diarsenic Trioxide
R	B11	Hexabromocyclododecane (HBCDD) and all major diastereoisomers	25637-99-4	Hexabromocyclododecane (HBCDD)
			3194-55-6	1,2,5,6,9,10-Hexabromocyclododecane
			134237-50-6	α–Hexabromocyclododecane
			134237-51-7	β–Hexabromocyclododecane
			134237-52-8	γ–Hexabromocyclododecane
R	B09	Shortchain Chlorinated Paraffins (C10 - C13)	85535-84-8	Shortchain Chlorinated Paraffins (C10 - C13)
R	B16	Tris (2-chloroethyl) phosphate (TCEP)	115-96-8	Tris (2-chloroethyl) phosphate (TCEP)
R	C12	Di(2-ethylhexyl) phthalate (DEHP)	117-81-7	Di(2-ethylhexyl) phthalate (DEHP)
R	C13	Dibutyl phthalate (DBP)	84-74-2	Dibutyl phthalate (DBP)
R	C14	Butylbenzyl phthalate (BBP)	85-68-7	Butylbenzyl phthalate (BBP)
R	A22	Cobalt dichloride (CoCl2)	7646-79-9	Cobalt dichloride (CoCl2)
R	A25	Lead chromate	7758-97-6	Lead chromate
R	A26	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)
R	A27	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	Lead sulfochromate yellow (C.I. Pigment Yellow 34)
R	C15	Diisobutyl phthalate (DIBP)	84-69-5	Diisobutyl phthalate (DIBP)
R	C16	Refractory Ceramic Fibres, Aluminosilicate	-	Refractory Ceramic Fibres, Aluminosilicate
R	C17	Refractory Ceramic Fibres, Zirconia Aluminosilicate	-	Refractory Ceramic Fibres, Zirconia Aluminosilicate
R	C18	Boric acid	10043-35-3	Boric acid
			11113-50-1	Boric acid
R	C19	Disodium tetraborate, anhydrous	1303-96-4	Disodium tetraborate decahydrate
			1330-43-4	Disodium tetraborate, anhydrous
			12179-04-3	Disodium tetraborate, pentahydrate
R	C20	Tetraboron disodium heptaoxide, hydrate	12267-73-1	Tetraboron disodium heptaoxide, hydrate
R	C21	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)
R	C22	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)

Criteria	Substance group classification No.	Substance groups (SVHC)	CAS #	Substance name
A	B17	4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)
R	A29	Strontium chromate	7789-06-2	Strontium chromate
R	B20	2,2'-dichloro-4,4'-methylenedi aniline (MOCA)	101-14-4	2,2'-dichloro-4,4'-methylenedianiline (MOCA)
R	A30	Potassium hydroxyoctaoxodizincate dichromate	11103-86-9	Potassium hydroxyoctaoxodizincate dichromate
R	A31	Pentazinc chromate octahydroxide	49663-84-5	Pentazinc chromate octahydroxide
R	C23	Bis(2-methoxyethyl) phthalate	117-82-8	Bis(2-methoxyethyl) phthalate
R	C24	4-(1,1,3,3-tetramethylbutyl)ph enol, (4-tert-Octylphenol)	140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)
R	C25	Bis(2-methoxyethyl) ether	111-96-6	Bis(2-methoxyethyl) ether
R	C26	N,N-dimethylacetamide (DMAC)	127-19-5	N,N-dimethylacetamide (DMAC)
R	B23	Decabromodiphenyl ether	1163-19-5	Decabromodiphenyl ether
R	A48	Sulfurous acid, lead salt, dibasic	62229-08-7	Sulfurous acid, lead salt, dibasic
R	C38	1,2-bis(2-methoxyethoxy)etha ne (TEGDME; triglyme)	112-49-2	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)
R	A49	Trilead dioxide phosphonate	12141-20-7	Trilead dioxide phosphonate
R	C39	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)
R	C40	4-Aminoazobenzene	1960/9/3	4-Aminoazobenzene
R	A50	Tetralead trioxide sulfate	12202-17-4	Tetralead trioxide sulfate
R	A51	Orange lead (lead tetroxide)	1314-41-6	Orange lead (lead tetroxide)
R	A52	Pyrochlore, antimony lead yellow	8012-00-8	Pyrochlore, antimony lead yellow
R	A53	Pentalead tetraoxide sulphate	12065-90-6	Pentalead tetraoxide sulphate
R	C41	1,2-Diethoxyethane	629-14-1	1,2-Diethoxyethane
R	C42	Diboron trioxide	1303-86-2	Diboron trioxide
R	A54	Dibutyltin dichloride (DBTC)	683-18-1	Dibutyltin dichloride (DBTC)
R	A55	Lead cynamidate	20837-86-9	Lead cynamidate
R	C43	N,N-dimethylformamide	1968/12/2	N,N-dimethylformamide
R	A56	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	68784-75-8	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped
R	C44	1.2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	1.2-Benzenedicarboxylic acid, dipentylester, branched and linear
R	C45	Diisopentylphthalate (DIPP)	605-50-5	Diisopentylphthalate (DIPP)
R	C46	N-pentyl-isopentylphthalate	776297-69-9	N-pentyl-isopentylphthalate
R	A57	Lead titanium trioxide	12060-00-3	Lead titanium trioxide
R	A58	Lead titanium zirconium oxide	12626-81-2	Lead titanium zirconium oxide
R	A59	Lead oxide sulfate	12036-76-9	Lead oxide sulfate
R	A60	[Phthalato(2-)]dioxotrilead	69011-06-9	[Phthalato(2-)]dioxotrilead
R	A61	Dioxobis(stearato)trilead	12578-12-0	Dioxobis(stearato)trilead
R	A62	Fatty acids, C16-18, lead salts	91031-62-8	Fatty acids, C16-18, lead salts
R	A63	Lead dinitrate	10099-74-8	Lead dinitrate

Exhibit 1: Content Judgment Flow 1.

(Correlation between reportable application and threshold level)

Follow the flow chart below to rate Y or N for the content flag (Y/N) for each of the substance groups in Annex A-1.

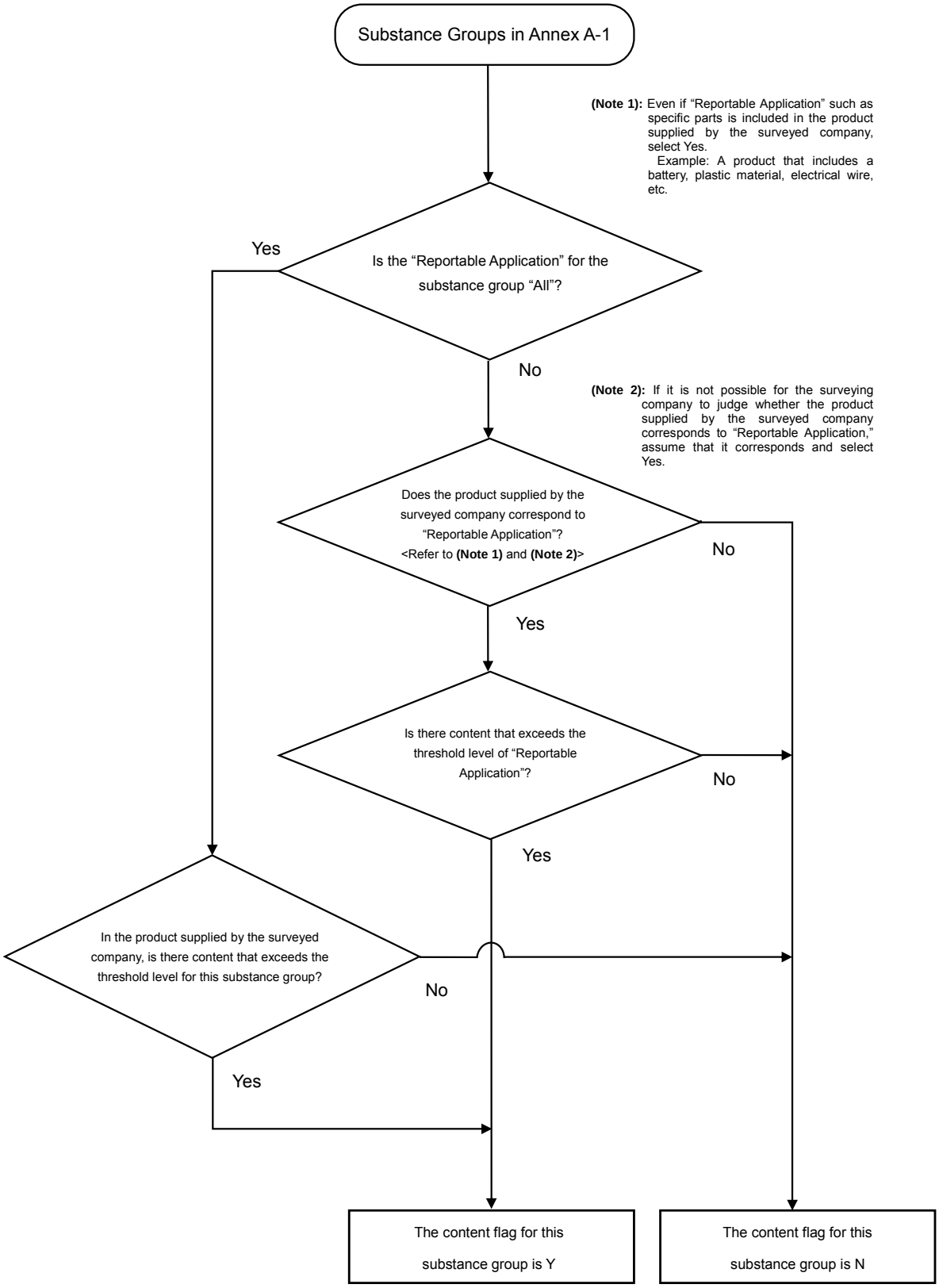


Exhibit 2: Content Judgment Flow 2. (Dual threshold level)

< Quotation from JIG -101 Ed 4.1 Annex C>

Note 1: This flow chart is applicable to the following substance groups.

A10: Mercury/mercury compounds (All, except batteries)
A17: Tributyl Tin Oxide (TBTO)
A28: Tri-substiituted organostannic compounds
B03: Polybrominated Diphenylethers (PBDEs)
B13: Perfluorooctane sulfonate (PFOS)

Note 2: “Does the content of the substance based on the defined denominator exceed the specific numerical value?” in the flow chart refers to, for example, the “0.1% by weight of homogeneous materials” for whether the homogeneous materials exceed 0.1% by weight as a denominator in the case of A10: Mercury/mercury compound. In the case of A17: Tributyl tin oxide (TBTO), this refers to “0.1% by weight of product” for whether the product exceeds 0.1% by weight as a denominator.

Note 3: In the case of A17: Tributyl tin oxide (TBTO), only “intentionally added” is applied to the threshold level as a Level 2 substance group in the Survey Response Tools, and only “0.1% by weight of product” is applied as a Level 3 SVHC.

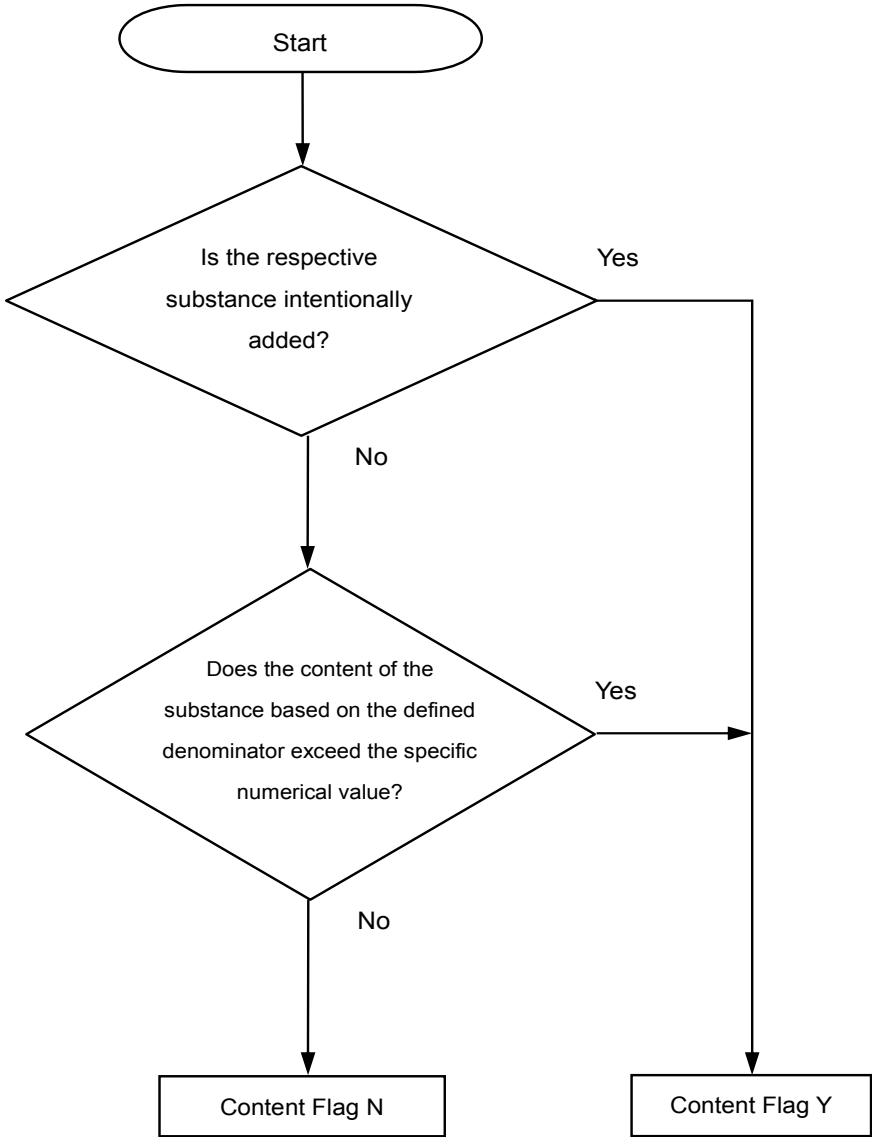


Exhibit 3: Response Example 1. (Unit that includes a battery)

Example situation: A “battery unit,” which is a product by a certain unit manufacturer, is comprised of a battery (single) and battery case. The following is an example of a response (lead/lead compounds only) from this unit manufacturer to the customer, which was created based on the content information (response) obtained by the supplier of each of these component parts.

Points: ・For the content flag (Y/N) for the applicable substance groups, Y/N is rated even when a part that is subject to “Reportable Application” is installed in the product supplied by the surveyed company, as a part that is subject to “Reportable Application.”
(Refer to 5. (4) and Exhibit 1. Content Judgment Flow 1.)

・In the example below, the content information associated with the content flag (Y) relating to the battery that was obtained from the supplier is reflected in the response as a battery unit.

・The threshold level for when the “Reportable Application” of A09: Lead/lead compounds is “All” is “0.1% by weight of homogeneous material (1,000 ppm).” However, when the total content (2.5 mg) of lead contained in the battery is calculated in comparison to the weight of the battery (5 g), the concentration is 500 ppm, and since this exceeds the threshold level (40 ppm) of the battery, the content flag for lead/lead compounds as a battery unit was rated as Y.

1. Survey results to suppliers

Supplied product	Component part (Supplier)	Example of responses from each supplier; <Regarding lead/lead compounds only>								
		Survey unit mass(g)	Substance groups	Content flag (Y/N)	Total content (mg)	Intended use classification		Purpose of intended use	Application area	Maximum content rate of homogeneous material (ppm)
Battery unit	Battery (Company A)	5	A09:Lead/lead compounds	Y	2.5	Pb-B-1	Batteries containing lead exceeding 40ppm by weight of the battery.	Alloy	Cathode of the battery: Zinc CAN	150
	Battery case (Company B)	10	A09:Lead/lead compounds	N	-	-	-	-	-	-

2. Response to customer of unit manufacturer

	Example of response regarding battery unit (survey item); <Regarding lead/lead compounds only>								
	Survey unit mass(g)	Substance groups	Content flag (Y/N)	Total content (mg)	Intended use classification		Purpose of intended use	Application area	Maximum content rate of homogeneous material (ppm)
Battery unit	15	A09:Lead/lead compounds	Y	2.5	Pb-B-1	Batteries containing lead exceeding 40ppm by weight of the battery.	Alloy	Cathode of the battery: Zinc CAN	150

Exhibit 3: Response Example 2.

(Case where contained substance is applicable to responses for both substance group and SVHC, Part 1)

Situation: 1. The unit mass of a plastic part (homogeneous material) that is a product supplied by the surveyed company is 200 g.
2. This plastic part contains 0.2% (0.4 g) lead chromate (CAS No. 7758-97-6) as a colorant.

Points:

- Although lead chromate is on the REACH candidate list of SVHC, it is also a substance applicable to the RoHS Directive (lead compound, hexavalent chromium compound) depending on the state of its content and thus, a response at the substance group level
- In this example, the content flag is Y since the content of lead chromate exceeds the threshold level(1000ppm) for A09: Lead/Chromium VI compounds, and a response for each content information is required.
- The content flag for A07: Chromium VI compounds is N due to the threshold level(1000ppm) falling below the specified level, but this is an example where responses have been voluntarily entered regarding information on each of the contents.
- Since the lead chromate as an SVHC on level 3 exceeds the threshold level of 0.1% (denominator for the calculation formula is the unit mass of the supplied product), responses are entered for information on each of the contents.

State of content:

- Mass of lead in lead chromate (0.4 g) = 0.4 g X 0.641 (metal conversion factor) = 0.2564 g
  Content rate of lead in homogeneous material = (0.2564 g÷200 g) X100 = 0.1282% ≒ 1300 ppm
- Mass of hexavalent chromium in lead chromate (0.4 g) = 0.4 g X 0.161 (metal conversion factor) = 0.0644g≒64mg, content rate of hexavalent chromium n homogeneous material = (0.0644 g÷200 g) X 100 = 0.0322% ≒ 320 ppm
- Weight concentration per surveying unit of lead chromate (0.4 g) = (0.4 g÷200 g) x 100 = 0.2%

Response to customer

Survey item
Plastic component

Response at substance group level (Image of Level 2 of Survey and Response Tool)

Survey unit mass(g)	Substance groups	Content flag (Y/N)	Total content (mg)	Intended use classification		Purpose of intended use	Application area	Maximum content rate of homogeneous material (ppm)
200	A09:Lead/lead compounds	Y	260	Pb-J-0	Cases containing intentionally added lead above 1000ppm in homogeneous material, excluding specified uses. (* Details in column on the right.)	Colorant	Plastic component	1300
	A07:Hexavalent Chromium Compounds	N	64	Cr-R-0	Cases containing 100ppm or less of intentionally added cadmium in homogeneous material, excluding specified uses. (* Details in column on the right.)	Colorant	Plastic component	320

Response as SVHC (Image of Level 3 of Survey and Response Tool)

Substance group classification No.	Substance groups	Intended use classification codes	Intended use classification		
J01	Specific REACH candidate list of SVHC for authorization. See Material Composition Survey and Response Manual, Ver.4.1 in Annex A-2.	J01-J-0	In cases where an individual substance(SVHC) exceeds 0.1% by weight of a survey unit		
CAS #	Information on specific substances contained	Compound content per surveying unit (mg)	Purpose of intended use	Application area	Weight concentration per surveying unit (wt%)
7758-97-6	Lead chromate	400	Colorant	Plastic component	0.2

*Note: Substance group classification no. J01 is a hypothetical substance group that is set only for the Survey and Response Tool.

Exhibit 3: Response Example 3.

(Case where contained substance is applicable to responses for both substance group and SVHC, Part 2)

Situation: 1. The unit mass of a product supplied by the surveyed company (Product A) is 200 g.

2. 5% (2.5 g) of Bis (2-ethylhexyl) phthalate (DEHP) CAS No. 117-81-7 only is contained in the plasticized material (50 g) of this product.

3. In addition to the plasticized materials, this product contains 150 g of an electronic component. (No contained substances)

Points:

- Although DEHP is on the REACH candidate list of SVHCs, it is also applicable to Appendix 17 (restricted substances) of the REACH Regulation depending on the state of its content, and responses at the substance group level on Level 2 are necessary. In such a case, the applicable substance group is C09: Phthalates Group 1 (BBP, DBP, DEHP).

- In general, for this supplied product, it is difficult for the surveyed company to judge whether this requester's product corresponds to "toy or child care article," which is a "reportable application." Accordingly, this example represents intended usage classification code: C09-J-2 (content flag is Y) that is selected when the content in homogeneous material of C09: Selected Phthalates Group 1 (BBP, DBP, DEHP) exceeds a threshold level of 0.1% (1,000 ppm).

  Note) Even if the content of C09 in supplied product exceeds 0.1A% (1,000 ppm), if it is known that the product will not be used as a "toy or child care article," it is possible to make the response one where C09-J-96 (content flag is N; for use other than as a product and content exceeds 0.1%) is selected.

- In this response example, there is DEHP content that exceeds the threshold level as both the substance group C09 on level 2: Phthalates Group 1 (BBP, DBP, DEH) and SVHC on level 2, due to the following content state, and responses are necesary.

State of content:

- Content rate of homogeneous material of DEHP = (2.5 g÷50 g) X 100 = 5.00% = 50,000 ppm

- Weight concentration per surveying unit of DEHP = (2.5 g÷200 g) X 100 = 1.25%

Response to customer

Response at substance group level (Image of Level 2 of Survey and Response Tool)

Survey item	Survey unit mass(g)	Substance groups	Content flag (Y/N)	Total content (mg)	Intended use classification		Purpose of intended use	Application area	Maximum content rate of homogeneous material (ppm)
Product A	200	C09: Selected Phthalates Group 1 (BBP, DBP, DEHP)	Y	2500	C09-J-1	In cases where the total content of BBP, DBP, and DEHP in homogeneous material is over 0.1% by weight	Plasticizer	XYZ	50000

Response as SVHC (Image of Level 3 of Survey and Response Tool)

Substance group classification No.	Substance groups	Intended use classification codes	Intended use classification		
J01	Specific REACH candidate list of SVHC for authorization. See Material Composition Survey and Response Manual, Ver.4.1 in Annex A-2.	J01-J-0	In cases where an individual substance(SVHC) exceeds 0.1% by weight of a survey unit		
CAS #	Information on specific substances contained	Compound content per surveying unit (mg)	Purpose of intended use	Application area	Weight concentration per surveying unit (wt%)
117-81-7	Di(2-ethylhexyl) phthalate (DEHP)	2500	Plasticizer	XYZ	1.25

*Note: Substance group classification no. J01 is a hypothetical substance group that is set only for the Survey and Response Tool.

Exhibit 4: Intended Use Classification List (Annex A-1: Four Heavy Metals) 1/3

Note 1) The ! mark in the column for Relevant regulation in the chart indicates that the intended use classification corresponds to an exemption as defined in the RoHS Directive (R), ELV Directive (E), or both Directives (RE).

Note 2): About the intended use classification codes (Hg-R-xx) for A10: Mercury/mercury compounds

These codes were created based on the contents of exemption revisions in the RoHS Directive published in the EU gazette in September 2010, but the validity date and content may be set in a further detailed manner depending on the various types of lamps. Accordingly, when there is mercury content, refer to the latest official gazette when judging application, etc. of RoHS exemption, and select an appropriate intended use classification code.

This manual (compatible with Tools Ver4.31) reflects the exceptions in the RoHS Directive and ELV Directive as of May 2013, and deletion, revision and addition of usage classifications have been carried out.

Classification No.	Substance group	Relevant regulation		Content flag coresponding to the right	Intended use classification codes	Intended use classification
		RoHS	ELV			
A05	Cadmium and Cadmium Compounds	!		Y	Cd-R-3	Printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses containing cadmium exceeding 100ppm in homogeneous material.
		!			Cd-R-4	Cadmium exceeding 100ppm in homogeneous material in alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more.
		!			Cd-R-6	Cadmium, exceeding 100ppm in homogeneous material, in cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide.
		!			Cd-R-8	Cadmium in an electric point that exceeds 100ppm in homogeneous material
		!			Cd-R-9	Cadmium in glass used for a filter glass or reflectance standards that exceeds 100ppm in homogeneous material
		!			Cd-R-10	Cadmium in a color conversion II-VI family LED used for solid-state lighting or a display system that exceeds 100ppm in homogeneous material ("cadmium per square millimeter in a light emission area" < 10 μg Cd)
		!			Cd-R-11	Cadmium in photoresistor of an analog optical coupler used for professional audio equipment that exceeds 100 ppm in homogeneous material
			!		Cd-E-2	Batteries for electric vehicles containing cadmium exceeding 100ppm in homogeneous material.
					Cd-B-2	Batteries containing cadmium exceeding 10ppm by weight of the battery.
					Cd-J-0	Cases containing intentionally added cadmium exceeding 100ppm in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Cd-J-99	Containing cadmium above 100pmm in homogeneous material. : Impurities/recycled materials/contamination
				N	Cd-R-0	Cases containing 100ppm or less of intentionally added cadmium in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Cd-RE-98	Containing 100ppm or less of cadmium in homogeneous material. : Impurities/recycled materials/contamination
A07	Hexavalent Chromium Compounds	!		Y	Cr-R-2	Hexavalent chromium up to 0.75% by weight as antirust for a carbon steel cooling system in an absorption refrigerator that exceeds 1000ppm in homogeneous material
			!		Cr-E-1	Anti-corrosion coatings containing hexavalent chromium exceeding 1000ppm in homogeneous material.(Other than below Cr-E-2)
			!		Cr-E-2	Corrosion preventive coating related to bolt and nut assembles for chassis applications, containing hexavalent chromium exceeding 1000ppm in homogeneous material.
			!		Cr-E-3	(Absorption) refrigerators in motor caravans containing hexavalent chromium up to 0.75% by weight, exceeding 1000 ppm in homogeneous material
					Cr-J-0	Cases containing intentionally added hexavalent chromium exceeding 1000ppm in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Cr-J-99	Containing hexavalent chromium above 1000ppm in homogeneous material. : Impurities/recycled materials/contamination
				N	Cr-R-0	Cases containing 1000ppm or less of intentionally added hexavalent chromium in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Cr-RE-98	Containing 1000ppm or less of hexavalent chromium in homogeneous material. : Impurities/recycled materials/contamination.
A09	Lead and Lead Compounds (continuing)	!	!	Y	Pb-RE-3	Steel materials (including batch type molten zinc plating, free-machining steel) containing up to 0.35% of lead by weight, exceeding 1000 ppm in homogeneous material
		!	!		Pb-RE-4	Copper alloy containing 4% or less, exceeding 1000ppm in homogeneous material, of lead by weight (e.g. brass, phosphor bronze)
		!	!		Pb-RE-5	Lead in a cathode ray tube that exceeds 1000ppm in homogeneous material
		!	!		Pb-RE-6	Lead up to 0.2% by weight in glass of a fluorescent tube that exceeds 1000ppm in homogeneous material
		!	!		Pb-RE-7	An electricity or electronic component of other than dielectric ceramics (e.g., piezoelectric device), automobile valves, and automobile plugs in a capacitor that contains lead in glass, ceramic, or glass/ceramic matrix compounds, exceeding 1000 ppm in homogeneous material
		!	!		Pb-RE-8	Lead in dielectric ceramic materials used in capacitors with a rated voltage of 125V AC or 250V DC or higher, exceeding 1000ppm in homogeneous material and excluding the intended uses indicated in Pb-RE-12 and Pb-E-20.
		!	!		Pb-RE-12	Lead in PTZ-based dielectric ceramic materials in a capacitor part of an IC chip or a discrete semiconductor (single function semiconductor), exceeding 1000 ppm in homogeneous material
			!		Pb-E-20	Lead in a dielectric ceramic for a capacitor part of ultrasonic sonar sensor, exceeding 1000 ppm in homogenous material
		!	!		Pb-RE-10	Lead used for a C-press compliant pin connector/system that exceeds 1000ppm in homogeneous material
		!			Pb-R-1	Aluminum materials containing 0.4% or less, exceeding 1000ppm in homogeneous material, of lead by weight
		!			Pb-R-2	Lead in high-melting point solder (lead-based alloys containing 85 % by weight or more lead)
		!			Pb-R-3	Lead, exceeding 1000ppm in homogeneous material, in soldering for servers, storage and storage array systems, and network infrastructure equipment for switching, signaling, transmission and network management for telecommunication
		!			Pb-R-5	Coating material for thermal conduction module C-rings, containing lead exceeding 1000ppm in homogeneous material.
		!			Pb-R-8	Lead, exceeding 1000ppm in homogeneous material, in solder for connecting semiconductor dies and carriers in flip chip IC packages
		!			Pb-R-10	Lead, exceeding 1000ppm in homogeneous material, in linear incandescent lamps with silicate coated tubes.
		!			Pb-R-11	Lead halide, containing lead exceeding 1000ppm in homogeneous material, as radiant agent in High Intensity Discharge(HID) lamps used for professional reprography applications.

Exhibit 4: Intended Use Classification List (Annex A-1: Four Heavy Metals) 2/3

Classification No.	Substance group	Relevant regulation		Content flag coresponding to the right	Intended use classification codes	Intended use classification
		RoHS	ELV			
A09	Lead and Lead Compounds (continued)	!			Pb-R-15	Lead, exceeding 1000ppm in homogeneous material, in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses
		!			Pb-R-17	Lead contained in finishing agents of 0.65 mm or finer pitch components other than connectors, exceeding 1000ppm in homogeneous material
		!			Pb-R-18	Lead, exceeding 1000ppm in homogeneous material, in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors.
		!			Pb-R-22	Lead, exceeding 1000ppm in homogeneous material, in lead bound in crystal glass as defined in Annex I (Categories 1,2,3 and 4) of Council Directive 69/493/EEC.
		!			Pb-R-23	Lead, exceeding 1000ppm in homogeneous material, in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting).
		!			Pb-R-24	Lead, exceeding 1000ppm in homogeneous material, in lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes.
		!			Pb-R-25	Lead, exceeding 1000ppm in homogeneous material, in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers.
		!			Pb-R-26	Lead, exceeding 1000ppm in homogeneous material, in cermet-based trimmer potentiometer elements.
		!			Pb-R-27	Lead, exceeding 1000ppm in homogeneous material, in the plating layer of high voltage diodes on the basis of a zinc borate glass body.
		!			Pb-R-30	Lead in white glass used for an optical purpose containing lead that exceeds 1000ppm in homogeneous material
		!			Pb-R-31	Lead in glass used for a filter glass or reflectance standards containing lead that exceeds 1000ppm in homogeneous material
		!			Pb-R-32	Lead in a shell (exterior casing) or bushing (a cylindrical component fitted inside a hole) of a bearing for a compressor containing coolant for heating, ventilation, air-conditioning, refrigeration, chilling, and HVACR, exceeding 1000ppm in homogeneous material
		!			Pb-R-33	Lead (lead of 1% or less by weight) as activator in fluorescent powder of a discharge lamp used as a suntan lamp containing phosphor such as BPS (BaSi2O5:Pb) that exceeds 1000ppm in homogeneous material
		!			Pb-R-34	Lead, exceeding 1000ppm in homogeneous material, as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb) as well as when used as speciality lamps for diazo-printing reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr, Ba)2MgSi2O7:Pb).
		!			Pb-R-35	Lead oxide, exceeding 1000ppm per unit of homogeneous material, used for structural elements on the surfaces of surface conduction electron emitter displays (SED), notably seal frit and frit ring.
			!		Pb-E-1	Aluminum with a lead content up to 1.5% by weight (0.4＜Pb≦1.5wt%)
			!		Pb-E-3	Lead, exceeding 1000ppm in homogeneous material, in bearing shells and bushes (alloy).
			!		Pb-E-4	Batteries containing lead exceeding 1000ppm in homogeneous material.
			!		Pb-E-5	Vibration dampers containing lead, exceeding 1000ppm in homogeneous material.
			!		Pb-E-6	Lead, exceeding 1000ppm in homogeneous material, in vulcanising agents and stabilisers for elastomers in fluid handling and powertrain applications containing up to 0.5% lead by weight.
			!		Pb-E-7	Lead, exceeding 1000ppm in homogeneous material, in bonding agents for elastomers in powertrain applications containing up to 0.5% lead by weight.
			!		Pb-E-10	Valve seats containing lead exceeding 1000ppm in homogeneous material.
			!		Pb-E-11	Pyrotechnic initiators containing lead exceeding 1000ppm in homogeneous material.
			!		Pb-E-12	Lead in solder for electric use that exceeds 1000ppm in homogeneous material (excluding solder on electronic circuit boards and glass)
			!		Pb-E-13	Lead in solder for installing an electric or electronic component on an electronic circuit board or for a component terminal that exceeds 1000ppm in homogeneous material (excluding electrolysis aluminum capacitors)
			!		Pb-E-15	Lead for soldering an air mass sensor on a glass surface that exceeds 1000ppm in homogeneous material
			!		Pb-E-16	Lead in solder for attaching a heat spreader and heat sink of a power semiconductor that exceeds 1000ppm in homogeneous material (The chip size is 1cm2 at least. The electric current density is 1A/mm2 at least.)
			!		Pb-E-17	Lead in solder for electric glazing on a glass surface that exceeds 1000ppm in homogeneous material (excluding solder for laminate glazing)
			!		Pb-E-18	Lead in solder used for laminate glazing that exceeds 1000ppm in homogeneous material
			!		Pb-E-19	Lead content in a zincked serial steel sheet of up to 0.35% by weight, exceeding 1000 ppm in homogenous material
			!		Pb-E-21	Lead-containing thermoelectric material used for automobile electrical equipment that reduces CO2 emission by exhaust heat exchange
			!		Pb-E-22	Lead in dielectric ceramic materials used in capacitors with a rated voltage of 125V AC or 250V DC or lower, exceeding 1000ppm in homogeneous material and excluding the intended uses indicated in Pb-RE-12 and Pb-E-20.
			!		Pb-E-23	Lead used for a compliant pin connector/system that exceeds 1000ppm in homogeneous material
					Pb-J-1	Containing lead above 300ppm in homogeneous material , for use in vinyl chloride wires.
					Pb-J-3	Containing above 0.009% of lead per surface treatment layer such as coating in parts/material used in toys. (Select this item only when the surveyor states that your product is used for a toy.)
					Pb-J-4	Use in products for children 12 years old and younger, containing lead exceeding 100ppm per surveying unit. (Select this item only when the surveyor states that your product is used for a surveyor's product for children of twelve years of age or under.)
					Pb-B-1	Batteries containing lead exceeding 40ppm by weight of the battery.
					Pb-J-0	Cases containing intentionally added lead above 1000ppm in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Pb-J-99	Containing lead above 1000ppm in homogeneous material : Impurities/recycled materials/contamination
				N	Pb-R-0	Cases containing 1000ppm or less of intentionally added lead in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Pb-RE-98	Containing 1000ppm or less of lead in homogeneous material : Impurities/recycled materials/contamination.

Exhibit 4: Intended Use Classification List (Annex A-1: Four Heavy Metals) 3/3

Classification No.	Substance group	Relevant regulation		Content flag coresponding to the right	Intended use classification codes	Intended use classification
		RoHS	ELV			
A10	Mercury and Mercury Compounds	!		Y	Hg-R-26	Mercury in a single-capped fluorescent lamp that does not exceed the following limitations (per burner): (a) For general illumination less than 30W: 2.5mg (b) For general illumination of 30W or higher and less than 50W: 3.5 mg (c) For general illumination of 50W or higher and less than 150W: 5 mg (d) For general illumination of 150W or higher: 15mg (e) Having a circular or square structure, 17mm or less in tube diameter, and for general illumination: 7mg (f) For a specific use: 5 mg
		!			Hg-R-17	Mercury in a double-capped strip fluorescent lamp (in each individual lamp) for general purposes that does not exceed the following limitations: (a) A three-wavelength phosphor of less than 9mm in tube diameter (e.g., T2) with normal lifetime: 4mg (b) A three-wavelength phosphor of 9mm or larger and of 17mm or less in tube diameter (e.g., T5) with normal lifetime: 3mg (c) A three-wavelength phosphor of over 17mm and 28mm or less in tube diameter (e.g., T8) with normal lifetime: 3.5mg (d) A three-wavelength phosphor of over 28mm in tube diameter (e.g., T12) with normal lifetime: 3.5mg (e) A three-wavelength phosphor with long lifetime (> 25,000 h): : 5mg
		!			Hg-R-28	Mercury in a double-capped fluorescent lamp (in each individual lamp) not for general purposes under the following conditions: (b) Nonlinear white lamps of all tube diameter: mercury that does not exceed 15mg (c) Mercury content not exceeding 15 mg in a nonlinear three-wavelength phosphor lamp of over 17 mm tube diameter (e.g., T9) (d) Mercury content not exceeding 15 mg in a lamp for any other general illumination or specific purposes (e.g., induction lamps)
		!			Hg-R-9	Mercury in a cold cathode ray fluorescent lamp or external electrode fluorescent lamp (CCFL or EEFL) for a specific purpose
		!			Hg-R-20	Mercury in a low-pressure discharge lamp (each individual lamp) other than Hg-R-26, Hg-R-17, Hg-R-28, or Hg-R-9
		!			Hg-R-11	Mercury in an extra-high voltage sodium (vapor) lamp for general illumination with an improved color rendering index over 60
		!			Hg-R-12	Mercury in an extra-high voltage sodium (vapor) lamp for general illumination of any other type (Hg-R-11)
		!			Hg-R-13	Mercury in a high-pressure mercury vapor lamp (HPMV)
		!			Hg-R-14	Mercury in a metal halide lamp (MH)
		!			Hg-R-15	Mercury in a vapor lamp for a specific purpose or of any other type that is not specifically mentioned in the Annex of Directive 2011/65/EU (or in the classification of intended use of mercury)
					Hg-B-1	Containing intentionally added or 0.0001% by weight (1ppm) of mercury in of the battery
					Hg-J-0	Cases containing intentionally added mercury above 1000ppm in homogeneous material, excluding specified uses. (* Details in column on the right.)
					Hg-J-99	Containing mercury above 1000ppm in homogeneous material : Impurities/recycled materials/contamination.
					Hg-R-0	Cases containing 1000ppm or less of intentionally added mercury in homogeneous material, excluding specified uses. (* Details in column on the right.)
				N	Hg-RE-98	Containing 1000ppm or less of mercury in homogeneous material. : Impurities/recycled materials/contamination.

Exhibit 5: Intended Use Classification List (Other than Four Heavy Metals in Annex A-1) 1/2

Classification No.	Substance group	Relevant regulation		Content flag coresponding to the right	Intended use classification codes	Intended use classification
		RoHS	ELV			
A11	Nickel			Y	Ni-J-1	Cases containing intentionally added nickel, for use consisting of long-term contact with skin.
					Ni-J-2	In cases where a product has an unclear purpose and nickel is intentionally added
				N	Ni-J-98	Cases containing nickel other than Ni-J-1and Ni-J-2.(a product not staying in contact with skin for a considerable duration of time or containing impurities)
A17	Tributyl Tin Oxide （TBTO、CAS.No.56-35-9)			Y	A17-J-4	Cases containing intentionally added TBTO.
				N	A17-J-98	Cases containing impurities.
A28	Tri-substiituted organostannic compounds			Y	A28-J-4	In cases where tin content in homogeneous material is over 0.1% by weight
				Y	A28-J-5	Cases intentionally added and contained for uses other than A28-J-4
				N	A28-J-97	In cases where tin content in homogeneous material is 0.1% or less by weight
A23	Dibutyltin (DBT) compounds			Y	A23-J-1	In cases where tin content in 1-component or 2-component room temperature vulcanized sealant (RTV-1/RTV-2 sealant) and adhesives exceeds 0.1% by weight per homogeneous material
					A23-J-2	In cases where tin content exceeds 0.1% by weight in homogeneous material, and DBT compound is added to paint or coating for a molded item as accelerator
					A23-J-3	In cases where tin in soft PVC profile exceeds 0.1% by weight, regardless of soft PVC itself or co-extrusion with hard PVC
					A23-J-4	In cases where tin content per homogeneous material exceeds 0.1% by weight, excluding special uses (A23-J-1, 2, 3)
				N	A23-J-98	In cases where tin content in homogeneous material is 0.1% or less by weight
A24	Dioctyltin (DOT) compounds			Y	A24-J-0	・A cloth/leather part included in a surveyed product ・In cases where tin content in homogeneous material is over 0.1% by weight with a dual humoral room temperature curing molding kit (RTV-2 sealant molding kit) in use
					A24-J-1	In cases where a product has an unclear purpose and DOT is intentionally added
				N	A24-J-98	In cases where any dioctyl tin compound other than A24-J-0 and A24-J-1 is contained
A19	Beryllium Oxide (CAS No. 1304-56-9)			Y	A19-J-0	Cases containing above 0.1% beryllium oxide by weight per surveying unit.
				N	A19-J-98	Cases containing up to 0.1% beryllium oxide by weight per surveying unit.
B02	Polybrominated Biphenyls (PBBs)			Y	B02-J-0	Cases containing intentionally added PBB exceeding 1000ppm in homogeneous material. (* Details in column on the right.)
					B02-J-99	Containing PBB above 1000ppm in homogeneous material. : Impurities/recycled materials/contamination
				N	B02-R-0	Cases containing 1000ppm or less of intentionally added PBB in homogeneous material. (* Details in column on the right.)
					B02-R-98	Containing 1000ppm or less of PBB in homogeneous material. : Impurities/recycled materials/contamination
B03	Polybrominated Diphenyl ethers (PBDEs)			Y	B03-J-0	Cases containing intentionally added PBDE exceeding 1000ppm in homogeneous material. (* Details in column on the right.)
					B03-J-99	Containing PBDE above 1000ppm in homogeneous material. :Impurities/recycled materials/contamination
				N	B03-R-0	Cases containing 1000ppm or less of intentionally added PBDE in homogeneous material. (* Details in column on the right.)
					B03-R-98	Containing 1000ppm or less of PBDE in homogeneous material. :Impurities/recycled materials/contamination
B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD)			Y	B08-J-3	In cases where bromine element is used for a printed wiring board laminate and its content is above 0.09% by weight in the printed wiring board laminate
					B08-J-5	In cases where total bromine content exceeds 0.1% by weight for the use of plastic material.
					B08-J-4	In cases where a product has an unclear purpose and Brominated flame retardants is intentionally added
				N	B08-J-97	In cases where any brominated flame retardant other than B08-J-3, B08-J-4 or B08-J-5 is contained
B18	Chlorinated flame retardants			Y	B18-J-0	In cases where the chlorine element contained exceeds 0.09% by weight per the printed wiring board laminate, for the use of printed wiring board laminate
					B18-J-1	In cases where total chlorine content exceeds 0.1% by weight for the use of plastic material.
					B18-J-2	In cases where chlorine content is intentionally added as chlorinated flame retardant although the product's application is unclear
				N	B18-J-98	In cases where any Chlorinated flame retardants other than B18-J-0, B18-J-1 or B18-J-2 is contained
B05	Polychlorinated Biphenyls (PCBs) and specific substitutes			Y	B05-J-1	Cases containing intentionally added PCBs and specific substitutes.
				N	B05-J-98	Cases containing impurities.
B15	Polychlorinated Terphenyls (PCTs)			Y	B15-J-2	Cases containing above 0.005% PCTs by weight per surveying unit.
				N	B15-J-97	Cases containing up to 0.005% PCTs by weight per surveying unit.
B06	Polychlorinated Naphthalenes (more than 3 chlorine atoms)			Y	B06-J-1	Cases containing intentionally added polychlorinated naphthalenes.
				N	B06-J-98	Cases containing impurities.
B12	Perchlorates			Y	B12-J-0	Cases containing above 6ppb perchlorates by weight per surveying unit.
				N	B12-J-98	Cases containing up to 6ppb perchlorates by weight per surveying unit.

Exhibit 5: Intended Use Classification List (Other than Four Heavy Metals in Annex A-1) 2/2

Classification No.	Substance group	Relevant regulation		Content flag coresponding to the right	Intended use classification codes	Intended use classification
		RoHS	ELV			
B13	Perfluorooctane sulfonate (PFOS)			Y	B13-J-0	Cases intentionally containing PFOS in photoresist or anti-reflective coatings for the photolithography process
					B13-J-1	Cases intentionally containing PFOS in photo coating used in films, documents, and printing plates
					B13-J-2	Cases intentionally containing PFOS in mist suppressants used in chrome plating, chromium oxidation treatment, and reverse etching
					B13-J-3	Cases intentionally containing PFOS in mist suppressants used in electroless nickel-polytetrafluoroethylene (PTFE) plating
					B13-J-4	Cases intentionally containing PFOS in mist suppressants used in etching of plastic base materials in front of metallic films
					B13-J-6	Cases intentionally containing above 0.1wt% of PFOS in homogeneous material as a component of molding, or cases intentionally containing above 1μg/m^2 of PFOS in cladding for textiles or other coated material, excluding specified uses (B13-J-0, 1, 2, 3, 4)
					B13-J-7	Cases intentionally containing PFOS, excluding specified uses (B13-J-0, 1, 2, 3, 4, 6, 8, 9)
					B13-J-8	Cases containing above 0.1wt% of PFOS in homogeneous material as an impurity, excluding specified uses (B13-J-0, 1, 2, 3, 4, 6, 7, 9)
					B13-J-9	Cases containing PFOS exceeding 0.001wt% as a component of a drug or substance, excluding specified uses (B13-J-0, 1, 2, 3, 4, 6, 7, 8)
				N	B13-J-92	Cases containing less than 1μg/m^2 of PFOS as an impurity in photoresist or anti-reflective coatings for the photolithography process
					B13-J-93	Cases containing less than 1μg/m2 of PFOS as an impurity in photo coating used in film, documents, or printing plates
					B13-J-94	Cases containing less than 0.001wt% of PFOS as an impurity in mist suppressants used in chrome plating, chromium oxidation treatment, and reverse etching
					B13-J-95	Cases containing less than 0.001wt% of PFOS as an impurity in mist suppressants used in electroless nickel-polytetrafluoroethylene (PTFE) plating
					B13-J-96	Cases containing less than 0.001wt% of PFOS as an impurity in mist suppressants used in etching of plastic base materials in front of metallic films
					B13-J-89	Cases containing less than 0.001wt% of PFOS as an impurity and as a component of a drug or substance, excluding specified uses (B13-J-92, 93, 94, 95, 96)
					B13-J-90	Cases containing less than 0.1wt% of PFOS in homogeneous material as an impurity and as a component of molding, or cases containing less than 1μg/m2 of PFOS as an impurity in cladding for textiles or other coated material, excluding specified uses (B13-J-92, 93, 94, 95, 96)
					B13-J-91	Cases containing PFOS as in impurity, excluding specified uses (B13-J-92, 93, 94, 95, 96, 89, 90)
B10	Fluorinated greenhouse gases (PFC, SF6, HFC)			Y	B10-J-0	Cases containing intentionally added fluorinated greenhouse gases.
				N	B10-J-98	Cases containing impurities.
B19	Polyvinyl chloride (PVC) and PVC copolymer			Y	B19-J-0	Cases containing a total chlorine content of over 0.1% by weight for the use of plastic material.
				N	B19-J-98	Cases containing up to 0.1% of total chlorine by weight for the use of plastic material.
C01	Asbestos			Y	C01-J-1	Cases containing intentionally added asbestos.
				N	C01-J-98	Cases containing impurities.
C02	Azocolourants and azodyes which form certain aromatic amines			Y	C02-J-2	Leather products and fiber products containing azocolourants and azodyes, which form 0.003% of certain aromatic amines by weight.
					C02-J-3	In cases where a product has an unclear purpose and "Azocolourants and azodyes which form certain aromatic amines" is intentionally added
				N	C02-J-98	Cases containing azocolourants and azodyes which form certain aromatic amines other than C02-J-2 or C02-J-3.
C04	Ozone Depleting Substances			Y	C04-J-1	Cases containing intentionally added ozone depleting substances.
				N	C04-J-98	Cases containing impurities.
C06	Radioactive Substances			Y	C06-J-1	Cases containing intentionally added radioactive substances.
				N	C06-J-98	Cases containing impurities.
C07	Formaldehyde			Y	C07-J-0	Cases containing above 0.0075% formaldehyde by weight in fiber products.
					C07-J-1	Cases containing intentionally added formaldehyde (excluding C07-J-0 above).
				N	C07-J-98	Cases containing impurities (excluding C07-J-0 above).
C08	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl) (CAS No. 3846-71-7)			Y	C08-J-0	Cases containing intentionally added phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl).
				N	C08-J-98	Cases containing impurities.
C09	Selected Phthalates Group 1 (BBP, DBP, DEHP)			Y	C09-J-1	Cases containing above 0.1wt% of plasticized material (homogeneous material) for use as a toy or child care article as the total of BBP, DBP and DEHP.
					C09-J-2	Cases containing above 0.1wt% of plasticized material (homogeneous material) for a product with an unclear purpose as the total of BBP, DBP and DEHP.
				N	C09-J-96	Cases containing over 0.1% of BBP, DBP and DEHP as combined total by weight in plasticized material (homogeneous material) that is used for products other than the uses in C09-J-1
					C09-J-97	Cases containing 0.1wt% or less of plasticized material (homogeneous material) as the total of BBP, DBP and DEHP, for uses other than C09-J-1 and C09-J-2.
C10	Selected Phthalates Group 2 (DIDP, DINP, DNOP)			Y	C10-J-0	Cases containing above 0.1wt% of plasticized material (homogeneous material) for use as a children's toy that can be placed in a child's mouth or child care article as the total of DIDP, DINP and DNOP.
					C10-J-1	Cases containing above 0.1wt% of plasticized material (homogeneous material) for a product with an unclear purpose as the total of DIDP, DINP and DNOP.
				N	C10-J-97	Cases containing over 0.1% of DIDP, DINP and DNOP as a combined total by weight in plasticized material (homogeneous material) that is used in products other than uses in C10-J-0
					C10-J-98	Cases containing 0.1wt% or less of plasticized material (homogeneous material) as the total of DIDP, DINP and DNOP, for uses other than C10-J-0 and C10-J-1.
C11	Dimethyl fumarate			Y	C11-J-0	In cases where the content in homogeneous material is over 0.00001% by weight
				N	C11-J-98	In cases where the content in homogeneous material is 0.00001% or less by weight
C47	Di-isodecyl phthalate (DIDP)			Y	C47-J-0	Cases containing intentionally added Di-isodecyl phthalate (DIDP).
				N	C47-J-98	Cases containing impurities.
C48	Di-n-hexyl Phthalate (DnHP)			Y	C48-J-0	Cases containing intentionally added Di-n-hexyl Phthalate.
				N	C48-J-98	Cases containing impurities.

Exhibit 6: Intended Use Classification List (SVHC covered by REACH in Annex A-2) 1/2

Note): For each of the SHVC on the Level 3 screen of the Survey and Response Tools Ver4.31, the following usage classification codes are not displayed, but the substance group numbers are displayed. (Both are saved as JGP file data.)

Classification No.	Substance group	Content flag coresponding to the right	Intended use classification codes	Intended use classification
A17	Tributyl Tin Oxide (TBTO)	Y	A17-J-3	Cases containing above 0.1% by weight per surveying unit.
		N	A17-J-97	Cases containing up to 0.1% by weight per surveying unit.
A20	Diarsenic Pentoxide	Y	A20-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A20-J-98	Cases containing up to 0.1% by weight per surveying unit.
A21	Diarsenic Trioxide	Y	A21-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A21-J-98	Cases containing up to 0.1% by weight per surveying unit.
B11	Hexabromocyclododecane (HBCDD)	Y	B11-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	B11-J-98	Cases containing up to 0.1% by weight per surveying unit.
B09	Shortchain Chlorinated Paraffins (C10 – C13)	Y	B09-J-1	Cases containing above 0.1% by weight per surveying unit.
		N	B09-J-98	Cases containing up to 0.1% by weight per surveying unit.
B16	Tris (2-chloroethyl) phosphate (TCEP)	Y	B16-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	B16-J-98	Cases containing up to 0.1% by weight per surveying unit.
C12	Di(2-ethylhexyl) phthalate (DEHP)	Y	C12-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C12-J-98	Cases containing up to 0.1% by weight per surveying unit.
C13	Dibutyl phthalate (DBP)	Y	C13-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C13-J-98	Cases containing up to 0.1% by weight per surveying unit.
C14	Butylbenzyl phthalate (BBP)	Y	C14-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C14-J-98	Cases containing up to 0.1% by weight per surveying unit.
A22	Cobalt dichloride (CoCl2)	Y	A22-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A22-J-98	Cases containing up to 0.1% by weight per surveying unit.
A25	Lead chromate	Y	A25-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A25-J-98	Cases containing up to 0.1% by weight per surveying unit.
A26	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	Y	A26-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A26-J-98	Cases containing up to 0.1% by weight per surveying unit.
A27	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	Y	A27-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A27-J-98	Cases containing up to 0.1% by weight per surveying unit.
C15	Diisobutyl phthalate (DIBP)	Y	C15-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C15-J-98	Cases containing up to 0.1% by weight per surveying unit.
C16	Refractory Ceramic Fibres, Aluminosilicate	Y	C16-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C16-J-98	Cases containing up to 0.1% by weight per surveying unit.
C17	Refractory Ceramic Fibres, Zirconia Aluminosilicate	Y	C17-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C17-J-98	Cases containing up to 0.1% by weight per surveying unit.
C18	Boric acid	Y	C18-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C18-J-98	Cases containing up to 0.1% by weight per surveying unit.
C19	Disodium tetraborate, anhydrous	Y	C19-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C19-J-98	Cases containing up to 0.1% by weight per surveying unit.
C20	Tetraboron disodium heptaoxide, hydrate	Y	C20-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C20-J-98	Cases containing up to 0.1% by weight per surveying unit.
C21	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	Y	C21-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C21-J-98	Cases containing up to 0.1% by weight per surveying unit.
C22	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	Y	C22-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C22-J-98	Cases containing up to 0.1% by weight per surveying unit.
B17	4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	Y	B17-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	B17-J-98	Cases containing up to 0.1% by weight per surveying unit.
A29	Strontium chromate	Y	A29-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A29-J-98	Cases containing up to 0.1% by weight per surveying unit.
B20	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	Y	B20-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	B20-J-98	Cases containing up to 0.1% by weight per surveying unit.
A30	Potassium hydroxyoctaoxodizincate dichromate	Y	A30-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A30-J-98	Cases containing up to 0.1% by weight per surveying unit.
A31	Pentazinc chromate octahydroxide	Y	A31-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A31-J-98	Cases containing up to 0.1% by weight per surveying unit.
C23	Bis(2-methoxyethyl) phthalate	Y	C23-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C23-J-98	Cases containing up to 0.1% by weight per surveying unit.
C24	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	Y	C24-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C24-J-98	Cases containing up to 0.1% by weight per surveying unit.
C25	Bis(2-methoxyethyl) ether	Y	C25-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C25-J-98	Cases containing up to 0.1% by weight per surveying unit.
C26	N,N-dimethylacetamide (DMAC)	Y	C26-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C26-J-98	Cases containing up to 0.1% by weight per surveying unit.

Exhibit 6: Intended Use Classification List (SVHC covered by REACH in Annex A-2) 2/2

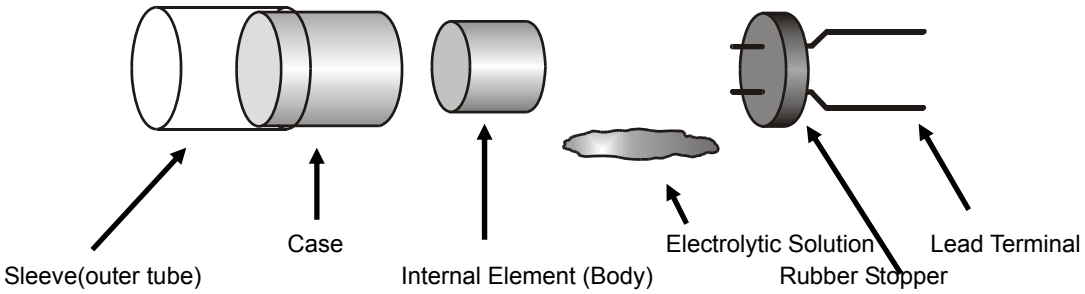
Classification No.	Substance group	Content flag coresponding to the right	Intended use classification codes	Intended use classification
B23	Decabromodiphenyl ether	Y	B23-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	B23-J-98	Cases containing up to 0.1% by weight per surveying unit.
A48	Sulfurous acid, lead salt, dibasic	Y	A48-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A48-J-98	Cases containing up to 0.1% by weight per surveying unit.
C38	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	Y	C38-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C38-J-98	Cases containing up to 0.1% by weight per surveying unit.
A49	Trilead dioxide phosphonate	Y	A49-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A49-J-98	Cases containing up to 0.1% by weight per surveying unit.
C39	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	Y	C39-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C39-J-98	Cases containing up to 0.1% by weight per surveying unit.
C40	4-Aminoazobenzene	Y	C40-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C40-J-98	Cases containing up to 0.1% by weight per surveying unit.
A50	Tetralead trioxide sulfate	Y	A50-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A50-J-98	Cases containing up to 0.1% by weight per surveying unit.
A51	Orange lead (lead tetroxide)	Y	A51-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A51-J-98	Cases containing up to 0.1% by weight per surveying unit.
A52	Pyrochlore, antimony lead yellow	Y	A52-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A52-J-98	Cases containing up to 0.1% by weight per surveying unit.
A53	Pentalead tetraoxide sulphate	Y	A53-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A53-J-98	Cases containing up to 0.1% by weight per surveying unit.
C41	1,2-Diethoxyethane	Y	C41-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C41-J-98	Cases containing up to 0.1% by weight per surveying unit.
C42	Diboron trioxide	Y	C42-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C42-J-98	Cases containing up to 0.1% by weight per surveying unit.
A54	Dibutyltin dichloride (DBTC)	Y	A54-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A54-J-98	Cases containing up to 0.1% by weight per surveying unit.
A55	Lead cynamidate	Y	A55-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A55-J-98	Cases containing up to 0.1% by weight per surveying unit.
C43	N,N-dimethylformamide	Y	C43-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C43-J-98	Cases containing up to 0.1% by weight per surveying unit.
A56	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	Y	A56-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A56-J-98	Cases containing up to 0.1% by weight per surveying unit.
C44	1.2-Benzenedicarboxylic acid, dipentylester, branched and linear	Y	C44-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C44-J-98	Cases containing up to 0.1% by weight per surveying unit.
C45	Diisopentylphthalate (DIPP)	Y	C45-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C45-J-98	Cases containing up to 0.1% by weight per surveying unit.
C46	N-pentyl-isopentylphthalate	Y	C46-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	C46-J-98	Cases containing up to 0.1% by weight per surveying unit.
A57	Lead titanium trioxide	Y	A57-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A57-J-98	Cases containing up to 0.1% by weight per surveying unit.
A58	Lead titanium zirconium oxide	Y	A58-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A58-J-98	Cases containing up to 0.1% by weight per surveying unit.
A59	Lead oxide sulfate	Y	A59-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A59-J-98	Cases containing up to 0.1% by weight per surveying unit.
A60	[Phthalato(2-)]dioxotrilead	Y	A60-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A60-J-98	Cases containing up to 0.1% by weight per surveying unit.
A61	Dioxobis(stearato)trilead	Y	A61-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A61-J-98	Cases containing up to 0.1% by weight per surveying unit.
A62	Fatty acids, C16-18, lead salts	Y	A62-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A62-J-98	Cases containing up to 0.1% by weight per surveying unit.
A63	Lead dinitrate	Y	A63-J-0	Cases containing above 0.1% by weight per surveying unit.
		N	A63-J-98	Cases containing up to 0.1% by weight per surveying unit.

Exhibit 7: Examples of Application Areas

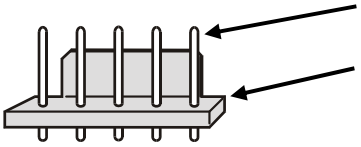
The following are example names of application areas that serve as references when completing the "application area" column of the survey.

Note: These examples do not represent all the application areas.

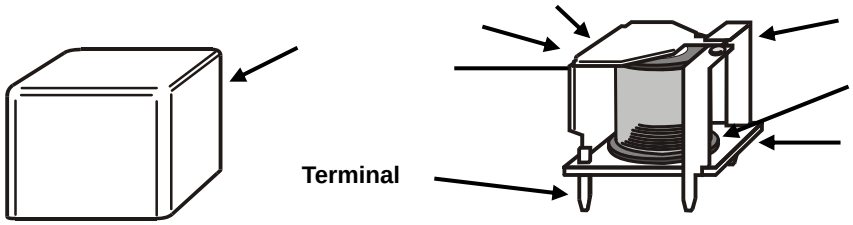
[Component Part Example 1] Aluminum electrolytic capacitor
Component parts: Sleeve, Case, Internal Element, Electrolytic Solution, Lead Terminal



[Component Part Example 2] Connectors
Component parts: Housing and contacts

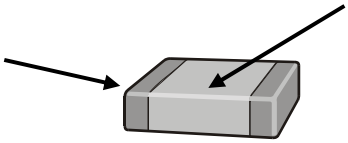


[Component Part Example 3] Switches, relays, and other parts with mechanical components
Component parts: Part case (molded plastic etc.), metal components (lever, frame, terminals, etc.), moving part (contact points, etc.)



* Please pay particular attention to special metals (alloys) used for plastic flame retardants, and electrical characteristics and lubrication of contact points.

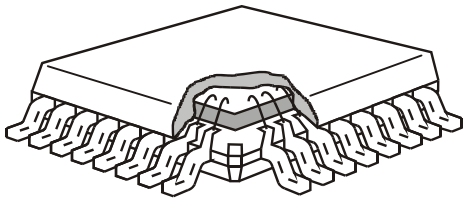
[Component Part Example 4] Surface-mounted chip parts
Component parts: Terminal and main body



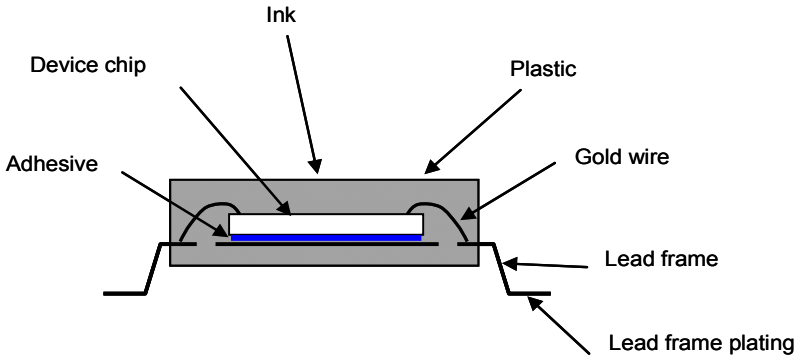
* The main body of the part is made of multiple materials and the substance concerned is present, break it down.
e.g.) Part (main body) ⟶ ceramic and internal electrode

[Component Part Example 5] Semiconductor devices
Component parts: Lead terminal (lead frame, etc.), package main body (molded plastic, etc.), and device chip

Outward appearance:

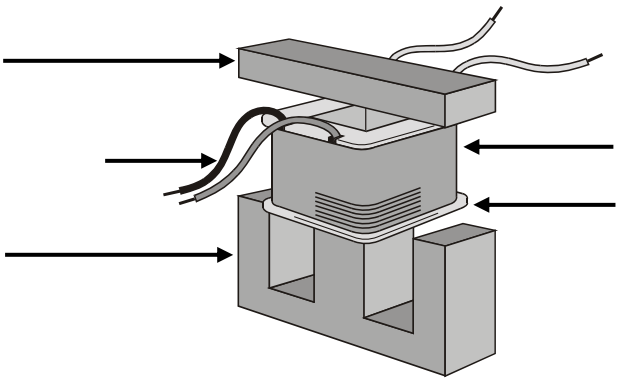


Cross section:



* Please pay particular attention to any flame retardants in the package plastic, and the lead material and treatment
* Make the response concerning the device chip as best you can

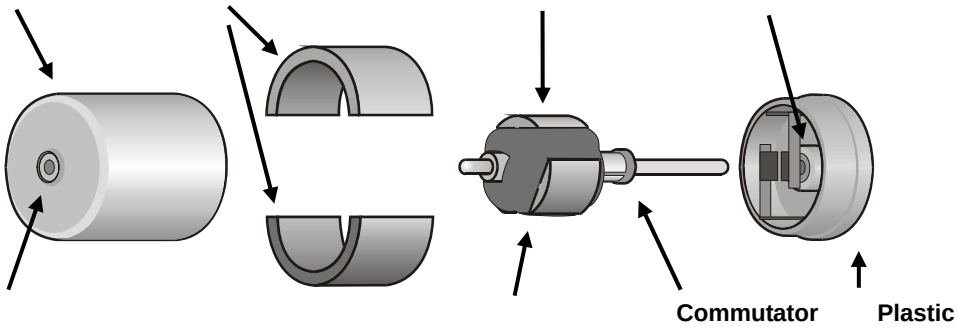
[Component Part Example 6] Transformers and inductors
Component parts: Core, coil, bobbin, lead wire, insulator, case frame, etc.



* Pay particular attention to flame retardants in plastic materials or insulating parts, impregnant in the coil, PVCs or flame retardants in the lead wire.

[Component Part Example 7] DC motors

Component parts: Part case (molded plastic, etc.), metal parts (shaft, rotor core, terminal, frame, etc.) brush, magnet, coil, and other



* Pay particular attention to special metals (alloys) used for flame retardants in plastic, and electrical characteristics and lubrication in commutators, as well as grease in bearings.
* Calculate the amount contained per part from the amounts contained in each of the part components, when the substance is contained in lead wire and electronic circuits.

[Component Part Example 8] Electrical cable (power cord)

Component parts: Conductor, plating, insulator (interior coating), and jacket (exterior coating)

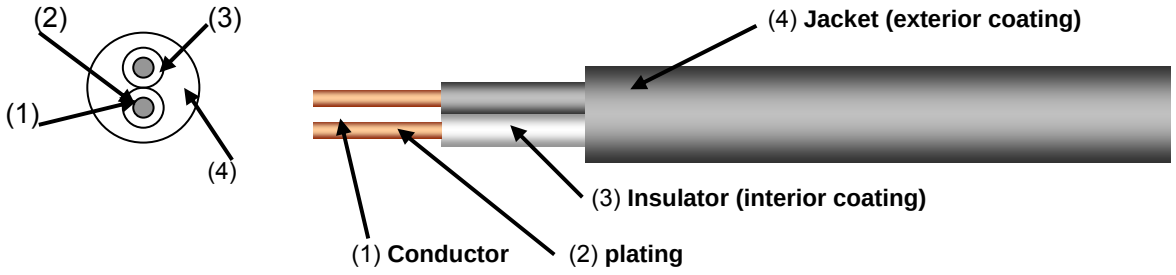


Exhibit 8: JIG Detailed Chemical Lists (with Metal Conversion Factor)

Quotation from Annex B of JIG-101 Ed 4.1 (Including substances added in IEC 62474 DB declarable substance list Version D4.00)

<Substance group classifications in alphabetical order>

1/16 Note 1) :If there is * in the column of Metal Conversion Factor, see Note) of 2) in "(5) Substance Information" of the text.

Note 2): A ** in the same column as described above indicates that it is not possible to calculate the metal coefficient factor due to the structure of the applicable substance not being specified.

Note 3): The 28 substances added to Version D4.00 of the IEC 62474 DB declarable substance list are indicated with an underline.

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	A05	Cadmium/cadmium compounds	Cadmium	1.000	7440-43-9
			Cadmium oxide	0.875	1306-19-0
			Cadmium sulfide	0.778	1306-23-6
			Cadmium chloride	0.613	10108-64-2
			Cadmium sulfate	0.539	10124-36-4
			Other cadmium compounds	-	-
R	A07	Chromium VI compounds	Chromium (VI) oxide	0.520	1333-82-0
			Barium chromate	0.205	10294-40-3
			Calcium chromate	0.333	13765-19-0
			Chromium trioxide	0.520	1333-82-0
			Lead (II) chromate	0.161	7758-97-6
			Lead chromate molybdate sulphate red	**	12656-85-8
			Lead sulfochromate yellow	**	1344-37-2
			Sodium chromate	0.321	7775-11-3
			Sodium dichromate	0.397	10588-01-9
			Strontium chromate	0.255	7789-06-2
			Potassium dichromate	0.353	7778-50-9
			Potassium chromate	0.268	7789-00-6
			Zinc chromate	0.287	13530-65-9
			Pentazinc chromate octahydroxide	0.090	49663-84-5
			Potassium hydroxyoctaoxodizincate dichromate	0.250	11103-86-9
			Other hexavalent chromium compounds	-	-
R	A09	Lead/lead compounds	Lead	1.000	7439-92-1
			Lead(II) sulfate	0.683	7446-14-2
			Lead(II) carbonate	0.775	598-63-0
			Lead(II) chromate	0.641	7758-97-6
			Lead chromate molybdate sulphate red	**	12656-85-8
			Lead hydroxidcarbonate	0.801	1319-46-6
			Lead acetate	0.637	301-04-2
			Lead (II) acetate, trihydrate	0.546	6080-56-4
			Lead phosphate	0.766	7446-27-7
			Lead selenide	0.724	12069-00-0
			Lead (IV) oxide	0.866	1309-60-0
			Lead (II,IV) oxide	0.907	1314-41-6
			Lead (II) sulfide	0.866	1314-87-0
			Lead (II) oxide	0.928	1317-36-8
			Lead(II) carbonate basic	0.801	1319-46-6
			Lead hydroxidcarbonate	0.801	1344-36-1
			Lead(II) phosphate	0.766	7446-27-7
			Lead sulfochromate yellow	**	1344-37-2
			Lead(II) titanate	0.686	12060-00-3
			Lead sulfate,sulphuric acid, lead salt	1.000	15739-80-7
			Lead sulphate,tribasic	0.850	12202-17-4
			Lead stearate	0.268	1072-35-1
			Other lead compounds	-	-
R	A10	Mercury/mercury compounds	Mercury	1.000	7439-97-6
			Mercuric chloride	-	33631-63-9
			Mercury (II) chloride	0.739	7487-94-7
			Mercuric sulfate	0.676	7783-35-9
			Mercuric nitrate	0.618	10045-94-0
			Mercuric (II) oxide	0.926	21908-53-2
			Mercuric sulfide	0.862	1344-48-5
			Other mercury compounds	-	-

Exhibit 8: (Cont'd)
2/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	A11	Nickel	-	1.000	7440-02-0
R	A17	Tributyl Tin Oxide (TBTO)	-	0.398	56-35-9
R	A28	Tri-substiituted organostannic compounds	Triphenyltin=N, N-dimethyldithiocarbamate	0.252	1803-12-9
			Triphenyltinfluoride	0.322	379-52-2
			Triphenyltinacetate	0.29	900-95-8
			Triphenyltinchloride	0.308	639-58-7
			Triphenyltinhydroxide	0.323	76-87-9
			Triphenyltin fattyacid((9-11)salt)	0.234 0.234 0.228 0.222	18380-71-7 18380-72-8 47672-31-1 94850-90-5
			Triphenyltinchloroacetate	0.268	7094-94-2
			Tributyltinmethacrylate	0.316	2155-70-6
			Bis(tributyltin)fumalate	0.342	6454-35-9
			Tributyltinfluoride	0.384	1983-10-4
			Bis(tributyltin)2,3-dibromosuccinate	0.278	31732-71-5
			Tributyltinacetate	0.34	56-36-0
			Tributyltinlaurate	0.243	3090-36-6
			Bis(tributyltin)phthalate	0.319	4782-29-0
			Coplymer of alkyl(c=8) acrylate,methyl methacrylate and tributyltin methacrylate	0.18	67772-01-4
			Tributyltinsulfamate	0.307	6517-25-5
			Bis(tributyltin)maleate	0.341	14275-57-1
			Tributyltinchloride	0.365	1461-22-9, 7342-38-3
			Tributyltin cyclopentane carbonate=mixture	**	85409-17-2
			Tributyltin-1, 2,3,4,4a, 4b, 5,6,10,10a-decahydro-7-isoplopyl-1, 4a-dimethyl-1-phenanthrencarboxylatemix	**	26239-64-5
			Other tri-substituted organostannic compounds	-	-
I	A19	Beryllium Oxide (BeO)	-	-	1304-56-9
R	A20	Diarsenic Pentoxide	-	*	1303-28-2
R	A21	Diarsenic Trioxide	-	*	1327-53-3
R	A22	Cobalt dichloride (CoCl2)	-	*	7646-79-9
R	A23	Dibutyltin (DBT) compounds	Dibutyltin oxide	0.477	818-08-6
			Dibutyltin diacetate	0.338	1067-33-0
			Dibutyltin dilaurate	0.188	77-58-7
			Dibutyltin maleate	0.342	78-04-6
			Other dibutyltin compounds	-	-

Exhibit 8: (Cont'd)
3/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	A24	Dioctyltin (DOT) compounds	Dioctyl Tin Oxide	0.329	870-08-6
			Dioctyltin dilaurate	0.160	3648-18-8
			Other Dioctyltin compounds	-	-
R	A25	Lead chromate	-	*	7758-97-6
R	A26	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	-	*	12656-85-8
R	A27	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	-	*	1344-37-2
R	A29	Strontium chromate	-	*	7789-06-2
R	A30	Potassium hydroxyoctaoxodizincate dichromate	-	*	11103-86-9
R	A31	Pentazinc chromate octahydroxide	-	*	49663-84-5
R	A48	Sulfurous acid, lead salt, dibasic	-	*	62229-08-7
R	A49	Trilead dioxide phosphonate	-	*	12141-20-7
R	A50	Tetralead trioxide sulfate	-	*	12202-17-4
R	A51	Orange lead (lead tetroxide)	-	*	1314-41-6
R	A52	Pyrochlore, antimony lead yellow	-	*	8012-00-8
R	A53	Pentalead tetraoxide sulphate	-	*	12065-90-6
R	A54	Dibutyltin dichloride (DBTC)	-	*	683-18-1
R	A55	Lead cynamidate	-	*	20837-86-9
R	A56	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	-	*	68784-75-8
R	A57	Lead titanium trioxide	-	*	12060-00-3
R	A58	Lead titanium zirconium oxide	-	*	12626-81-2
R	A59	Lead oxide sulfate	-	*	12036-76-9
R	A60	[Phthalato(2-)]dioxotrilead	-	*	69011-06-9
R	A61	Dioxobis(stearato)trilead	-	*	12578-12-0
R	A62	Fatty acids, C16-18, lead salts	-	*	91031-62-8
R	A63	Lead dinitrate	-	*	10099-74-8
R	B02	Polybrominated Biphenyls (PBBs)	Polybrominated Biphenyls	-	59536-65-1
			Dibromobiphenyl	-	92-86-4
			2-Bromobiphenyl	-	2052-07-5
			3-Bromobiphenyl	-	2113-57-7
			4-Bromobiphenyl	-	92-66-0
			Tribromobiphenyl	-	59080-34-1
			Tetrabromobiphenyl	-	40088-45-7
			Pentabrphenyl	-	56307-79-0
			Hexabromobiphenyl	-	59080-40-9
			hexabromo-1,1-biphenyl	-	36355-01-8
			Firemaster FF-1	-	67774-32-7
			Heptabromobiphenyl	-	35194-78-6
			Octabromobiphenyl	-	61288-13-9
			Nonabiphenyl	-	27753-52-2
			Decabromobiphenyl	-	13654-09-6

Exhibit 8: (Cont'd)
4/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	B03	Polybrominated Diphenylethers (PBDEs)	Bromodiphenyl ether	-	101-55-3
			Dibromodiphenyl ethers	-	2050-47-7
			Tribromodiphenyl ether	-	49690-94-0
			Tetrabromodiphenyl ethers	-	40088-47-9
			Pentabromodidphenyl ether (note: Commercially available PeBDPO is a complex reaction mixture containing a variety of brominated diphenyloxides.)	-	32534-81-9 (CAS number used for commercial grades of PeBDPO)
			Hexabromodiphenyl ether	-	36483-60-0
			Heptabromodiphenylether	-	68928-80-3
			Octabromodiphenyl ether	-	32536-52-0
			Nonabromodiphenylether	-	63936-56-1
			Decabromodiphenyl ether	-	1163-19-5
R	B11	Hexabromocyclododecane(HBCDD) and all major diastereoisomers	Hexabromocyclododecane (HBCDD)	-	25637-99-4, 3194-55-6
			alpha-hexabromocyclododecane	-	134237-50-6
			beta-hexabromocyclododecane	-	134237-51-7
			gamma-hexabromocyclododecane	-	134237-52-8
I	B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD)	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(14)[Aliphatic/alicyclic brominated compounds]	-	-
			Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(15)[Aliphatic/alicyclic brominated compounds in combination with antimony compounds]	-	-
			Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(16)[Aromatic brominated compounds excluding brominated diphenyl ether and biphenyls)]	-	-
			Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(17)[Aromatic brominated compounds excluding brominated diphenyl ether and biphenyls) in combination with antimony compounds]	-	-
			Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(22)[Aliphatic/alicyclic chlorinated and brominated compounds]	-	-
			Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(42)[Brominated organic phosphorus compounds]	-	-
			Poly(2,6-dibromo-phenylene oxide)	-	69882-11-7
			Tetra-decabromo-diphenoxy-benzene	-	58965-66-5
			1,2-Bis(2,4,6-tribromo-phenoxy) ethane	-	37853-59-1
			3,5,3',5'-Tetrabromo-bisphenol A (TBBA)	-	79-94-7
			TBBA, unspecified	-	30496-13-0

Exhibit 8: (Cont'd)
5/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
I	B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD) (con'd)	TBBA-epichlorhydrin oligomer	-	40039-93-8
			TBBA-TBBA-diglycidyl-ether oligomer	-	70682-74-5
			TBBA carbonate oligomer	-	28906-13-0
			TBBA carbonate oligomer, phenoxy end capped	-	94344-64-2
			TBBA carbonate oligomer, 2,4,6-tribromo-phenol terminated	-	71342-77-3
			TBBA-bisphenol A-phosgene polymer	-	32844-27-2
			Brominated epoxy resin end-capped with tribromophenol	-	139638-58-7
			Brominated epoxy resin end-capped with tribromophenol	-	135229-48-0
			TBBA-(2,3-dibromo-propyl-ether)	-	21850-44-2
			TBBA bis-(2-hydroxy-ethyl-ether)	-	4162-45-2
			TBBA-bis-(allyl-ether)	-	25327-89-3
			TBBA-dimethyl-ether	-	37853-61-5
			Tetrabromo-bisphenol S	-	39635-79-5
			TBBS-bis-(2,3-dibromo-propyl-ether)	-	42757-55-1
			2,4-Dibromo-phenol	-	615-58-7
			2,4,6-tribromo-phenol	-	118-79-6
			Pentabromo-phenol	-	608-71-9
			2,4,6-Tribromo-phenyl-alltl-ether	-	3278-89-5
			Tribromo-phenyl-allyl-ether, unspecified	-	26762-91-4
			Bis(methyl)tetrabromo-phtalate	-	55481-60-2
			Bis(2-ethlhexyl)tetrabromo-phtalate	-	26040-51-7
			2-Hydroxy-propyl-2-(2-hydroxy-ethoxy)-ethyl-TBP	-	20566-35-2
			TBPA, glycol-and propylene-oxide esters	-	75790-69-1
			N,N'-Ethylene –bis-(tetrabromo-phthalimide)	-	32588-76-4
			Ethylene-bis(5,6-dibromo-norbornane-2,3-dicarboximide)	-	52907-07-0
			2,3-Dibromo-2-butene-1,4-diol	-	3234-02-4
			Dibromo-neopentyl-glycol	-	3296-90-0
			Dibromo-propanol	-	96-13-9
			Tribromo-neopentyl-alcohol	-	36483-57-5
			Poly tribromo-styrene	-	57137-10-7
			Tribromo-styrene	-	61368-34-1
			Dibromo-styrene grafted PP	-	171091-06-8
			Poly-dibromo-styrene	-	31780-26-4
			Bromo-/Chloro-paraffins	-	68955-41-9
			Bromo-/Chloro-alpha-olefin	-	82600-56-4
			Vinylbromide	-	593-60-2
			Tris-(2,3-dibromo-propyl)-isocyanurate	-	52434-90-9
			Tris(2,4-Dibromo-phenyl) phosphate	-	49690-63-3
			Tris(tribromo-neopentyl) phosphate	-	19186-97-1
			Chlorinated and brominated phosphate esther	-	125997-20-8
			Pentabromo-toluene	-	87-83-2

Exhibit 8: (Cont'd)
6/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
I	B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD) (con'd)	Pentabromo-benzyl bromide	-	38521-51-6
			1,3-Butadiene homopolymer,brominated	-	68441-46-3
			Pentabromo-benzyl-acrylate, monomer	-	59447-55-1
			Pentabromo-benzyl-acrylate, polymer	-	59447-57-3
			Decabromo-diphenyl-ethane	-	84852-53-9
			Tribromo-bisphenyl-maleinimide	-	59789-51-4
			Tetrabromo-chyclo-octane	-	31454-48-5
			1,2-Dibromo-4-(1,2 dibromo-methyl)-cyclo-hexane	-	3322-93-8
			TBPA Na salt	-	25357-79-3
			Tetrabromo phthalic-anhydride	-	632-79-1
			Octabromo-1,1,3-trimethyl-1-phenylindane (FR-1808)	-	155613-93-7
			Other Brominated Flame Retardants	-	-
I	B18	Chlorinated flame retardants	Tetrakis(2-chloroethyl)dichloroisopentyldiphosphate	-	38051-10-4
			Tris(1-chloro-2-propyl)phosphate	-	13674-84-5
			Tris(2,3-dichloro-1-propyl)phosphate	-	66108-37-0
R	B05	Polychlorinated Biphenyls (PCBs) and specific substitutes	Polychlorinated Biphenyls (all isomers and congeners)	-	1336-36-3
			Monomethyl-tetrachloro-diphenyl methane (Ugilec 141)	-	76253-60-6
			Monomethyl-dichloro-diphenyl methane (Ugilec 121, Ugilec 21)	-	81161-70-8
			Monomethyl-dibromo-diphenyl methane (DBBT)	-	99688-47-8
R	B15	Polychlorinated Terphenyls (PCTs)	Polychlorinated Terphenyls (all isomers and congeners)	-	61788-33-8
R	B06	Polychlorinated Naphthalenes (more than 3 chlorine atoms)	Polychlorinated Naphthalenes	-	70776-03-3
			Other polychlorinated Naphthalenes	-	-
R	B09	Shortchain Chlorinated Paraffins (C10 – C13)	Alkanes, C10-13, chloro	-	85535-84-8
			Alkanes, C10-12, chloro	-	108171-26-2
			Alkanes, C12-13, chloro	-	71011-12-6
			Alkanes, chloro	-	61788-76-9
			Chlorinated polyethylene	-	64754-90-1
			Other Short Chain Chlorinated Paraffins	-	-
R	B16	Tris(2-chloroethyl) phosphate (TCEP)	-	-	115-96-8
R	B12	Perchlorates	Lithium perchlorate	-	7791-03-9
			Other perchlorate compounds	-	-
R	B13	Perfluorooctane sulfonate (PFOS)	Perfluoroctane Sulfonates (PFOS) $C_8F_{17}SO_2X$, w here X = OR, NR or other derivative	-	-
R	B10	Fluorinated greenhouse gases (PFC, SF_6, HFC)	Tetrafluoromethane (Carbon tetrafluoride, PFC-14)	-	75-73-0
			Hexafluoroethane (PFC-116)	-	76-16-4
			Octafluoropropane (PFC-218)	-	76-19-7
			Decafluorobutane (PFC-31-10)	-	355-25-9

Exhibit 8: (Cont'd)
7/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	B10	Fluorinated greenhouse gases (PFC, SF6, HFC) (con'd)	Dodecafluoropentane (PFC-41-12)	-	678-26-2
			Tetradecafluorohexane (PFC-51-14)	-	355-42-0
			Octafluorocyclobutane (PFC-c318)	-	115-25-3
			Sulfur Hexafluoride (SF6)	-	2551-62-4
			Trifluoromethane - (HFC-23)	-	75-46-7
			Difluoromethane - (HFC-32)	-	75-10-5
			Methyl fluoride – (HFC-41)	-	593-53-3
			2H,3H-Decafluoropentane – (HFC-43-10mee)	-	138495-42-8
			Pentafluoroethane (HFC-125)	-	354-33-6
			1,1,2,2-Tetrafluoroethane – (HFC-134)	-	359-35-3
			1,1,1,2-Tetrafluoroethane – (HFC-134a)	-	811-97-2
			1,1-Difluoroethane – (HFC-152a)	-	75-37-6
			1,1,2-Trifluoroethane–(HFC-143)	-	430-66-0
			1,1,1-Trifluoroethane – (HFC-143a)	-	420-46-2
			2H-Heptafluoropropane– (HFC-227ea)	-	431-89-0
			1,1,1,2,2,3-hexafluoro-propane (HFC-236cb)	-	677-56-5
			1,1,1,2,3,3-Hexafluoropropane – (HFC-236ea)	-	431-63-0
			1,1,1,3,3,3-Hexafluoropropane – (HFC-236fa)	-	690-39-1
			1,1,2,2,3-Pentafluoropropane – (HFC-245ca)	-	679-86-7
			1,1,1,3,3-Pentafluoropropane – (HFC-245fa)	-	460-73-1
			1,1,1,3,3-Pentafluorobutane – (HFC-365mfc)	-	406-58-6
I	B19	Polyvinyl Chloride (PVC) and PVC Copolymers	Polyvinyl chloride (PVC)	-	9002-86-2
			Other Polyvinyl chlorides	-	-
			PVC Copolymers	-	-
A	B17	4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	-	-	548-62-9
R	B20	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	-	-	101-14-4
R	B23	Decabromodiphenyl ether	-	-	1163-19-5
R	C01	Asbestos	Asbestos	-	1332-21-4
			Actinolite	-	77536-66-4
			Amosite (Grunerite)	-	12172-73-5
			Anthophyllite	-	77536-67-5
			Chrysotile	-	12001-29-5
			Crocidolite	-	12001-28-4
			Tremolite	-	77536-68-6

Exhibit 8: (Cont'd)
8/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C02	Azocolourants and azodyes which form certain aromatic amines	biphenyl-4-ylamine	-	92-67-1
			Benzidine	-	92-87-5
			4-chloro-o-toluidine	-	95-69-2
			2-naphthylamine	-	91-59-8
			o-aminoazotoluene	-	97-56-3
			5-nitro-o-toluidine	-	99-55-8
			4-chloroaniline	-	106-47-8
			4-methoxy-m-phenylenediamine	-	615-05-4
			4,4'-methylenedianiline	-	101-77-9
			3,3'-dichlorobenzidine	-	91-94-1
			3,3'-dimethoxybenzidine	-	119-90-4
			3,3'-dimethylbenzidine	-	119-93-7
			4,4'-methylenedi-o-toluidine	-	838-88-0
			6-methoxy-m-toluidine	-	120-71-8
			4,4'-methylene-bis(2-chloroaniline)	-	101-14-4
			4,4'-oxydianiline	-	101-80-4
			4,4'-thiodianiline	-	139-65-1
			o-toluidine	-	95-53-4
			4-methyl-m-phenylenediamine	-	95-80-7
			2,4,5-trimethylaniline	-	137-17-7
			o-anisidine	-	90-04-0
			4-amino azobenzene	-	60-09-3
R	C04	Ozone Depleting Substances	Trichlorofluoromethane (CFC-11)	-	75-69-4
			Dichlorodifluoromethane (CFC-12)	-	75-71-8
			Chlorotrifluoromethane (CFC-13)	-	75-72-9
			Pentachlorofluoroethane (CFC-111)	-	354-56-3
			Tetrachlorodifluoroethane (CFC-112)	-	76-12-0
			1,1,2,2-Tetrachloro-1,2-difluoroethane (CFC-112)	-	76-12-0
			1,1,1,2-Tetrachloro-2,2-difluoroethane (CFC-112a)	-	76-11-9
			Trichlorotrifluoroethane (CFC-113)	-	76-13-1,
			1,1,2-Trichloro-1,2,2 trifluoroethane (CFC-113)	-	76-13-1
			1,1,1-Trichloro-2,2,2 trifluoroethane (CFC-113a)	-	354-58-5
			Dichlorotetrafluoroethane (CFC-114)	-	76-14-2
			Monochloropentafluoroethane (CFC-115)	-	76-15-3
			Heptachlorofluoropropane (CFC-211)	-	422-78-6
				-	135401-87-5
			1,1,1,2,2,3,3-Heptachloro-3-fluoropropane (CFC-211aa)	-	422-78-6
			1,1,1,2,3,3,3-Heptachloro-2-fluoropropane (CFC-211ba)	-	422-81-1
			Hexachlorodifluoropropane (CFC-212)	-	3182-26-1
			Pentachlorotrifluoropropane (CFC-213)	-	2354-06-5 134237-31-3
			Tetrachlorotetrafluoropropane (CFC-214)	-	29255-31-0
			1,2,2,3-Tetrachloro-1,1,3,3-tetrafluoropropane (CFC-214aa)	-	2268-46-4
			1,1,1,3-Tetrachloro-2,2,3,3-tetrafluoropropane (CFC-214cb)	-	-

Exhibit 8: (Cont'd)
9/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C04	Ozone Depleting Substances (cont'd)	Trichloropentafluoropropane (CFC-215)	-	1599-41-3
			1,2,2-Trichloropentafluoropropane (CFC-215aa)	-	1599-41-3
			1,2,3-Trichloropentafluoropropane (CFC-215ba)	-	76-17-5
			1,1,2-Trichloropentafluoropropane (CFC-215bb)	-	-
			1,1,3-Trichloropentafluoropropane (CFC-215ca)	-	-
			1,1,1-Trichloropentafluoropropane (CFC-215cb)	-	4259-43-2
			Dichlorohexafluoropropane (CFC-216)	-	661-97-2
			Chloroheptafluoropropane (CFC-217)	-	422-86-6
			Bromochloromethane (Halon-1011)	-	74-97-5
			Dibromodifluoromethane (Halon-1202)	-	75-61-6
			Bromochlorodifluoromethane (Halon-1211)	-	353-59-3
			Bromotrifluoromethane (Halon-1301)	-	75-63-8
			Dibromotetrafluoroethane (Halon-2402)	-	124-73-2
			Tetrachloromethane (carbon tetrachloride)	-	56-23-5
			1,1,1-Trichloroethane (methylchloroform)	-	71-55-6
			Bromomethane (methyl bromide)	-	74-83-9
			Bromoethane (ethyl bromide)	-	74-96-4
			1-Bromopropane (n-propyl bromide)	-	106-94-5
			Trifluoroiodomethane (trifluoromethyl iodide)	-	2314-97-8
			Chloromethane (methyl chloride)	-	74-87-3
			Dibromofluoromethane (HBFC-21 B2)	-	1868-53-7
			Bromodifluoromethane (HBFC-22 B1)	-	1511-62-2
			Bromofluoromethane (HBFC-31 B1)	-	373-52-4
			Tetrabromofluoroethane (HBFC-121 B4)	-	306-80-9
			Tribromodifluoroethane (HBFC-122 B3)	-	-
			Dibromotrifluoroethane (HBFC-123 B2)	-	354-04-1
			Bromotetrafluoroethane (HBFC-124 B1)	-	124-72-1
			Tribromofluoroethane (HBFC-131 B3)	-	-
			Dibromodifluoroethane (HBFC-132 B2)	-	75-82-1
			Bromotrifluoroethane (HBFC-133 B1)	-	421-06-7
			Dibromofluoroethane (HBFC-141 B2)	-	358-97-4
			Bromodifluoroethane (HBFC-142 B1)	-	420-47-3
			Bromofluoroethane (HBFC-151 B1)	-	762-49-2
			Hexabromofluoropropane (HBFC-221 B6)	-	-
			Pentabromodifluoropropane (HBFC-222 B5)	-	-
			Tetrabromotrifluoropropane (HBFC-223 B4)	-	-

Exhibit 8: (Cont'd)
10/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C04	Ozone Depleting Substances (cont'd)	Tribromotetrafluoropropane (HBFC-224 B3)	-	-
			Dibromopentafluoropropane (HBFC-225 B2)	-	431-78-7
			Bromohexafluoropropane (HBFC-226 B1)	-	2252-78-0
			Pentabromofluoropropane (HBFC-231 B5)	-	-
			Tetrabromodifluoropropane (HBFC-232 B4)	-	-
			Tribromotrifluoropropane (HBFC-233 B3)	-	-
			Dibromotetrafluoropropane (HBFC-234 B2)	-	-
			Bromopentafluoropropane (HBFC-235 B1)	-	460-88-8
			Tetrabromofluoropropane (HBFC-241 B4)	-	-
			Tribromodifluoropropane (HBFC-242 B3)	-	70192-80-2
			Dibromotrifluoropropane (HBFC-243 B2)	-	431-21-0
			Bromotetrafluoropropane (HBFC-244 B1)	-	679-84-5
			Tribromofluoropropane (HBFC-251 B3)	-	75372-14-4
			Dibromodifluoropropane (HBFC-252 B2)	-	460-25-3
			Bromotrifluoropropane (HBFC-253 B1)	-	421-46-5
			Dibromofluoropropane (HBFC-261 B2)	-	51584-26-0
			Bromodifluoropropane (HBFC-262 B1)	-	-
			Bromofluoropropane (HBFC-271 B1)	-	1871-72-3
			Dichlorofluoromethane (HCFC-21)	-	75-43-4
			Chlorodifluoromethane (HCFC-22)	-	75-45-6
			Chlorofluoromethane (HCFC-31)	-	593-70-4
			Tetrachlorofluoroethane (HCFC-121)	-	134237-32-4
			1,1,2,2-Tetrachloro-1-fluoroethane (HCFC-121)	-	354-14-3
			1,1,1,2-Tetrachloro-2-fluoroethane (HCFC-121a)	-	354-11-0
			Trichlorodifluoroethane (HCFC-122)		41834-16-6
			1,2,2-Trichloro-1,1-difluoroethane (HCFC-122)	-	354-21-2
			1,1,2-Trichloro-1,2-difluoroethane (HCFC-122a)	-	354-15-4
			1,1,1-Trichloro-2,2-difluoroethane (HCFC-122b)	-	354-12-1
			Dichlorotrifluoroethane(HCFC-123)	-	34077-87-7
			1,1-Dichloro-2,2,2-trifluoroethane (HCFC-123)	-	306-83-2
			1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)	-	354-23-4
				-	90454-18-5
			1,1-Dichloro-1,2,2-trifluoroethane (HCFC-123b)	-	812-04-4

Exhibit 8: (Cont'd)
11/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C04	Ozone Depleting Substances (cont'd)	Chlorotetrafluoroethane (HCFC-124)	-	63938-10-3
			2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)	-	2837-89-0
			1-chloro-1,1,2,2-tetrafluoroethane (HCFC-124a)	-	354-25-6
			Trichlorofluoroethane (HCFC-131)	-	27154-33-2;
				-	(134237-34-6)
			1,1,2-Trichloro-2-fluoroethane (HCFC-131)	-	359-28-4
			1,1,2-Trichloro-1-fluoroethane (HCFC131a)	-	811-95-0
			1,1,1-Trichloro-2-fluoroethane (HCFC-131b)	-	2366-36-1
			Dichlorodifluoroethane (HCFC-132)	-	25915-78-0
			1,2-Dichloro-1,2-difluoroethane (HCFC-132)	-	431-06-1
			1,1-Dichloro-2,2-difluoroethane (HCFC-132a)	-	471-43-2
			1,2-Dichloro-1,1-difluoroethane (HCFC-132b)	-	1649-08-7
			1,1-Dichloro-1,2-difluoroethane (HCFC-132c)	-	1842-05-3
			Chlorotrifluoroethane (HCFC-133)	-	1330-45-6
				-	431-07-2
			1-Chloro-1,2,2-trifluoroethane (HCFC-133)	-	1330-45-6
			2-Chloro-1,1,1-trifluoroethane (HCFC-133a)	-	75-88-7
			1-Chloro-1,1,2-trifluoroethane (HCFC-133b)	-	421-04-5
			Dichlorofluoroethane(HCFC-141)	-	1717-00-6;
				-	(25167-88-8)
			1,2-Dichloro-1-fluoroethane (HCFC-141)	-	430-57-9
			1,1-Dichloro-2-fluoroethane (HCFC-141a)	-	430-53-5
			1,1-Dichloro-1-fluoroethane (HCFC-141b)	-	1717-00-6
			Chlorodifluoroethane (HCFC-142)	-	25497-29-4
			2-Chloro-1,1-Difluoroethane (HCFC-142)	-	338-65-8
			1-Chloro-1,1-difluoroethane (HCFC-142b)	-	75-68-3
			1-Chloro-1,2-difluoroethane (HCFC-142a)	-	338-64-7
			Chlorofluoroethane (HCFC-151)	-	110587-14-9
			1-Chloro-2-fluoroethane (HCFC-151)	-	762-50-5
			1-Chloro-1-fluoroethane (HCFC-151a)	-	1615-75-4
			Hexachlorofluoropropane (HCFC-221)	-	134237-35-7
				-	29470-94-8
			1,1,1,2,2,3-Hexachloro-3-fluoropropane (HCFC-221ab)	-	422-26-4

Exhibit 8: (Cont'd)
12/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C04	Ozone Depleting Substances (cont'd)	Pentachlorodifluoropropane (HCFC-222)	-	134237-36-8
			1,1,1,3,3-pentachloro-2,2-difluoropropane (HCFC-222ca))	-	422-49-1
			1,2,2,3,3-pentachloro-1,1-difluoropropane (HCFC-222aa)	-	422-30-0
			Tetrachlorotrifluoropropane (HCFC-223)	-	134237-37-9
			1,1,3,3-Tetrachloro-1,2,2-trifluoropropane (HCFC-223ca)	-	422-52-6
			1,1,1,3-Tetrachloro-2,2,3-trifluoropropane (HCFC-223cb)	-	422-50-4
			Trichlorotetrafluoropropane (HCFC-224)	-	134237-38-0
			1,3,3-Trichloro-1,1,2,2-tetrafluoropropane (HCFC-224ca)	-	422-54-8
			1,1,3-Trichloro-1,2,2,3-tetrafluoropropane (HCFC-224cb)	-	422-53-7
			1,1,1-Trichloro-2,2,3,3-tetrafluoropropane (HCFC-224cc)	-	422-51-7
			Dichloropentafluoropropane (HCFC-225)	-	127564-92-5
			2,2-Dichloro-1,1,1,3,3-pentafluoropropane(HCFC-225aa)	-	128903-21-9
			2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC-225ba)	-	422-48-0
			1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225bb)	-	422-44-6
			3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)	-	422-56-0
			1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)	-	507-55-1
			1,1-Dichloro-1,2,2,3,3-pentafluoropropane(HCFC-225cc)	-	13474-88-9
			1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC-225da)	-	431-86-7
			1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC-225ea)	-	136013-79-1
			1,1-Dichloro-1,2,3,3,3-pentafluoropropane(HCFC-225eb)	-	111512-56-2
			Chlorohexafluoropropane (HCFC-226)	-	134308-72-8
			2-Chloro-1,1,1,3,3,3-hexafluoro-propane (HCFC-226da)	-	431-87-8
			Pentachlorofluoropropane (HCFC-231)	-	134190-48-0
			1,1,1,2,3-pentachloro-2-fluoro-propane (HCFC-231bb)	-	421-94-3
			Tetrachlorodifluoropropane (HCFC-232)	-	134237-39-1
			1,1,1,3-Tetrachloro-3,3-difluoropropane (HCFC-232fc)	-	460-89-9
			Trichlorotrifluoropropane (HCFC-233)	-	134237-40-4
			1,1,1-Trichloro-3,3,3-trifluoropropane (HCFC-233fb)	-	7125-83-9
			Dichlorotetrafluoropropane (HCFC-234)	-	127564-83-4
			1,2-Dichloro-1,2,3,3-tetrafluoropropane (HCFC-234db)	-	425-94-5
			Chloropentafluoropropane (HCFC-235)	-	134237-41-5
			1-Chloro-1,1,3,3,3-pentafluoropropane (HCFC-235fa)	-	460-92-4
			Tetrachlorofluoropropane (HCFC-241)	-	134190-49-1
			1,1,2,3-Tetrachloro-1-fluoropropane (HCFC-241db)	-	666-27-3

Exhibit 8: (Cont'd)
13/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C04	Ozone Depleting Substances (cont'd)	Trichlorodifluoropropane (HCFC-242)	-	134237-42-6
			1,3,3,Trichloro-1,1-difluoropropane (HCFC-242fa)	-	460-63-9
			Dichlorotrifluoropropane (HCFC-243)	-	134237-43-7
			1,1-Dichloro-1,2,2-trifluoropropane (HCFC-243cc)	-	7125-99-7
			2,3-Dichloro-1,1,1-trifluoropropane (HCFC-243db)	-	338-75-0
			3,3-Dichloro-1,1,1-trifluoropropane (HCFC-243fa)	-	460-69-5
			Chlorotetrafluoropropane (HCFC-244)	-	134190-50-4
			3-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244ca)	-	679-85-6
			1-Chloro-1,1,2,2-tetrafluoropropane (HCFC-244cc)	-	421-75-0
			Trichlorofluoropropane (HCFC-251)	-	134190-51-5
			1,1,3-Trichloro-1-fluoropropane (HCFC-251fb)	-	818-99-5
			1,1,2-Trichloro-1-fluoropropane (HCFC-251dc)	-	421-41-0
			Dichlorodifluoropropane (HCFC-252)	-	134190-52-6
			1,3-Dicloro-1,1-difluoropropane (HCFC-252fb)	-	819-00-1
			Chlorotrifluoropropane (HCFC-253)	-	134237-44-8
			3-Chloro-1,1,1-trifluoropropane (HCFC-253fb)	-	460-35-5
			Dichlorofluoropropane (HCFC-261)	-	134237-45-9
			1,1-Dichloro-1-fluoropropane (HCFC-261fc)	-	7799-56-6
			1,2-Dichloro-2-fluoro-propane (HCFC-261ba)	-	420-97-3
			Chlorodifluoropropane (HCFC-262)	-	134190-53-7
			1-Chloro-2,2-difluoropropane (HCFC-262ca)	-	420-99-5
			2-Chloro-1,3-difluoropropane (HCFC-262da)	-	102738-79-4
			1-Chloro-1,1-difluoropropane (HCFC-262fc)	-	421-02-3
			Chlorofluoropropane (HCFC-271)	-	134190-54-8
			2-Chloro-2-fluoropropane (HCFC-271ba)	-	420-44-0
			1-Chloro-1-fluoropropane (HCFC-271fb)	-	430-55-7
R	C06	Radioactive substances	Uranium-238	-	7440-61-1
			Radon	-	10043-92-2
			Americium-241	-	14596-10-2
			Thorium-232	-	7440-29-1
			Cesium-137	-	10045-97-3
			Strontium-90	-	10098-97-2
			Other radioactive substances	-	-
R	C07	Formaldehyde	-	-	50-00-0

Exhibit 8: (Cont'd)
14/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C08	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	-	-	3846-71-7
R	C09	Selected Phthalates Group 1 (BBP, DBP, DEHP)	Butyl benzyl phthalate (BBP)	-	85-68-7
			Dibutylphthalate (DBP)	-	84-74-2
			Bis (2-ethylhexyl) phthalate (DEHP)	-	117-81-7
R	C10	Selected Phthalates Group 2 (DIDP, DINP, DNOP)	1,2-Benzenedicarboxylic acid diisodecyl ester (DIDP)	-	26761-40-0 68515-49-1
			Diisononyl phthalate (DINP)	-	28553-12-0 68515-48-0
			Di-n-octyl phthalate (DNOP)	-	117-84-0
R	C11	Dimethyl fumarate	-	-	624-49-7
R	C12	Bis (2-ethylhexyl) phthalate (DEHP)	-	-	117-81-7
R	C13	Dibutylphthalate (DBP)	-	-	84-74-2
R	C14	Butyl benzyl phthalate (BBP)	-	-	85-68-7
R	C15	Diisobutyl phthalate (DIBP)	-	-	84-69-5
R	C16	Refractory Ceramic Fibres, Aluminosilicate	are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfill the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight	-	-

Exhibit 8: (Cont'd)
15/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C17	Refractory Ceramic Fibres, Zirconia Aluminosilicate	are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfill the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (µm) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight	-	-
R	C18	Boric acid	-	-	10043-35-3
			-	-	11113-50-1
R	C19	Disodium tetraborate, anhydrous	Disodium tetraborate decahydrate	-	1303-96-4
			Disodium tetraborate, anhydrous	-	1330-43-4
			Disodium tetraborate, pentahydrate	-	12179-04-3
R	C20	Tetraboron disodium heptaoxide, hydrate	-	-	12267-73-1
R	C21	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	-	-	71888-89-6
R	C22	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	-	-	68515-42-4
R	C23	Bis(2-methoxyethyl) phthalate	-	-	117-82-8
R	C24	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	-	-	140-66-9
R	C25	Bis(2-methoxyethyl) ether	-	-	111-96-6
R	C26	N,N-dimethylacetamide (DMAC)	-	-	127-19-5
R	C38	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)			112-49-2
R	C39	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)			110-71-4
R	C40	4-Aminoazobenzene			60-09-3
R	C41	1,2-Diethoxyethane			629-14-1
R	C42	Diboron trioxide			1303-86-2
R	C43	N,N-dimethylformamide			68-12-2

Exhibit 8: (Cont'd)
16/16

Criteria	Classification No.	Substance Group <Table A of JIG-101 Ed 4.1>	Substance name <Annex B of JIG-101 Ed 4.1>	Metal Conversion Factor	CAS No.
R	C44	1.2-Benzenedicarboxylic acid, dipentylester, branched and linear			84777-06-0
R	C45	Diisopentylphthalate (DIPP)			605-50-5
R	C46	N-pentyl-isopentylphthalate			776297-69-9
R	C47	Di-isodecyl phthalate (DIDP)			68515-49-1 and 26761-40-0
R	C48	Di-n-hexyl Phthalate (DnHP)			84-75-3

Note 7) C47 and C48 (phthalate esters) in the above substance group classifications are substances that were added to the IEC 62474 DB substance list (Version D4.00) in June 2013. Proposition 65 (warning label requirements) of the State of California in the United States is excerpted, and intended uses include cable plasticizer, etc.

Exhibit 9: Survey and Response Format (Data Format Ver4.31)

Output file (JGP file) Specifications

1 Line code

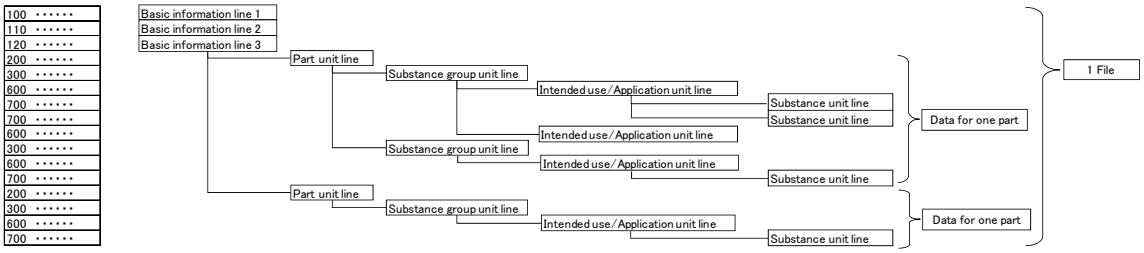
Basic information line 1	Line code 100	
Basic information line 2	Line code 110	
Basic information line 3	Line code 120	
Part unit line	Line code 200	
Substance groups unit line	Line code 300	
Substance unit line	Line code 400	(not used)
Material unit line	Line code 500	(not used)
Intended use/Application unit line	Line code 600	
Substance unit line	Line code 700	

Setting up eight lines above-mentioned lines, the line code is described at the head of line.
The relationship of the data are assigned by the order of the lines.

2 Composition of JGP file Ver4.31 for chemical substances

- The basic information lines 1,2 and 3 should be described in one line for one file.
- Two or more parts can be existed in one line.
- Two or more substance groups can be related to one part.
- Two or more intended use/application can be related to one substance group.
- Two or more substance can be related to one more intended use/application.
- The substance group of a part is described in a substance group unit line located after a part unit line.
- The intended use/application related to one substance group is described in intended use/application line located after a substance group line.
- TAB is used to separate data in each line.

Image of JGP file



Version Upgrade Management Rules for Data Format (Former JGPSSI):

(1) The first number in the version number is raised only when a definition change or addition to a data item or data line arises. (Example: Ver4.00 → Ver5.00)

(2) For revisions to the “Intended Use Master” in which additions or changes to the intended use classifications are reflected due to an addition or change to exemptions such as the RoHS Directive, and due to additions or deletions of applicable substance groups/substances, the first number after the decimal point is raised. (Example: Ver4.00 → Ver4.10)

(3) In cases where survey responses are not directly affected, such as changes to specifications (example: length of data) of data items, the second number after the decimal point is raised. (Example: Ver4.10 → Ver4.11)

(4) For other changes, decisions will be made separately upon holding discussions in the relevant WG.

Data Format Ver4.31

(In the Data Format Ver.4.31, changes have not been made to survey items (data items) from Date Format Ver.4.20)

*1 Not used for Ver4.31 →

Basic information line 1

Data order	1	2	3	4	5	6	7	8	9	10
Content	Line code	Language flag	format version Note 1:	Reference No.	Date of entry	Parts mass unit *1	Substance mass unit *1	Tool name	Respondent's date of data entry	Response type
Byte	3	1	5 and below	40 and below	10	1	1	40 and below	10	1
Remarks	100	0 : Japanese 1 : English 2 : Chinese	4.31		YYYY/MM/DD	1 :mg 2 :g 3 :kg 4 :t	1 :mg 2 :g 3 :kg 4 :t		YYYY/MM/DD	Fixed with 0. Note: For Tool Ver.3, 0 : Standard type 1 : Detailed type

Note 1: When the intended use application list is updated, raise the number of the first decimal place. Raise the number of the second decimal place for other change.

Basic information line 2

Data order	1	2	3	4	5	6	7	8	9	10
Content	Line code	Requester Division Name (English)	Requester Contact Name (English)	Requester Telephone No.	Requester Fax No.	Requester Email Address	Requester's management items 1	Requester's management items 2	Requester's management items 3	Respondent Company Name (English)
Byte	3	200 and below	200 and below	100 and below	100 and below	100 and below	80 and below	80 and below	80 and below	200 and below
Remarks	110									

11	12	13	14	15	16	17	18	19	20
Respondent Address (English)	Respondent Division Name (English)	Respondent Contact Name (English)	Respondent Telephone No.	Respondent Fax No.	Respondent Email Address	Requester's management items 4	Requester's management items 5	Requester's management items 6	Requester's Company Name (English)
200 and below	200 and below	200 and below	100 and below	100 and below	100 and below	80 and below	80 and below	80 and below	200 and below

21	22	23	24
Requester DUNS Number	Respondent DUNS Number	Additional information regarding survey responses (English)	Message from requester (English)
9	9	200 and below	200 and below

Basic information line 3

Data order	1	2	3	4	5	6	7	8	9	10
Content	Line code	Requester Division Name (Japanese/Chinese)	Requester Contact Name (Japanese/Chinese)	Respondent Company Name (Japanese/Chinese)	Respondent Address (Japanese/Chinese)	Respondent Division Name (Japanese/Chinese)	Respondent Contact Name (Japanese/Chinese)	Requester's Company Name (Japanese/Chinese)	Additional information regarding survey responses (Japanese/Chinese)	Message from requester (Japanese/Chinese)
Byte	3	200 and below	40 and below	200 and below	200 and below	200 and below	40 and below	200 and below	200 and below	200 and below
Remarks	120									

Part unit line

Data order	1	2	3	4	5	6	7	8	9	10
Content	Line code	Product/subpart number of requester	Product / subpart/material name of requester	Requester's Item1	Requester's Item2	Requester's Item3	Manufacturer Name	Respondent's product/subparts/material number	Respondent's Item1	Respondent's Item2
Byte	3	200 and below	160 and below	40 and below	40 and below	40 and below	200 and below	200 and below	200 and below	200 and below
Remarks	200									

11	12	13	14	15	16	17	18	19	20
Respondent's Item3	Surveying Unit	Survey Unit Mass (g/unit)	Use of ozone-depleting substances *1	List A substances contained *1	Column 7 *1	Column 8 *1	Column 9 *1	Column 10 *1	Column 11 *1
200 and below	20 and below	20 and below	1	1	80 and below	80 and below	80 and below	80 and below	80 and below
			0: No 1: Yes	0: No 1: Yes					

21	22	23	24	25	26	27	28	29	30
Column 12 *1	Data Version	Revision Date	Material Grade No.	Metal Type・JIS symbols	Coloring No.	Thickness(mm)	Color	Diameter(mm)	Respondent's product/subparts/material name
80 and below	40 and below	10	60 and below	60 and below	40 and below	10 and below	60 and below	10 and below	160 and below
		YYYY/MM/DD							

31
Overall Content Flag
1
0 : N *3 1 : Y

*3 Input Y, when more than one content flag is Y, Input N when all of content flags are N.
However, even one blank (null) in any content flag, makes this column blank (null).

Substance group unit line

Data order	1	2	3	4	5	6	7	8	9	10
Content	Line code	Classification No.	Total sum *1	Total Content (mg)	Application area *1	Purpose of use *1	Column 13 *1	Column 14 *1	Column 15 *1	Content Flag by Threshold Level
Byte	3	3	20 and below	20 and below	80 and below	80 and below	80 and below	80 and below	80 and below	1
Remarks	300									0 : N 1 : Y

11
Additional information on material composition of products *4
120 and below

*4 Use this column to input data at every substance group, when use standard type.

Intended use/Application unit line

Data order	1	2	3	4	5	6	7
Content	Line code	Intended use classification code	Purpose of use/Intended use	Application area	Content (mg)	Maximum content rate (ppm)	Additional information on material composition of products
Byte	3	12 and below	120 and below	120 and below	20 and below	20 and below	80 and below
Remarks	600						

Substance unit line

Data order	1	2	3	4	5	6	7
Content	Line code	CAS Number	Compound content per surveying unit (mg)	Purpose of use/Intended use	Application area	Weight concentration per surveying unit (automatically calculated)	Additional information on material composition of products
Byte	3	12 and below	20 and below	120 and below	120 and below	20 and below	120 and below
Remarks	700						

Exhibit 10:

Format Ver4.31 for Handwritten Response (Compliant with JIG-101 Ed 4.1 + Substances added to IEC62474 DB declarable substance list D4.00)

Requester & Respondent Information < Level 1 > Page 1/5

Requester Information	
Reference Number	
Date of Data Entry	
Company Name	
DUNS Number	
Division Name	
Contact Name	
Telephone Number	
Fax Number	
Email Address	
Message from requester	

Respondent Information	
Respondent's date of data	
Company Name	
DUNS Number	
Division Name	
Address	
Contact Name	
Telephone Number	
Fax Number	
Email Address	
Additional information regarding survey responses	

Product/Parts Information

Product/Parts Number	Product/Parts Name	Manufacturer Name	Type	Data Version	Revision Date	Surveying Unit	Survey Unit Mass	Overall Content Flag (Y/N)
							(g)	

Contained substance group information - Content Flag /Total Content < See Survey and response manual Ver4.3 for filling out>

Criteria	Classification No.	Substance Group (JIG-101 Ed 4.1 + DIDP & DnHP)	Content Flag(Y/N)		Total Content (mg)
R	A05	Cadmium and Cadmium Compounds	Y	N	
R	A07	Hexavalent Chromium Compounds	Y	N	
R	A09	Lead and Lead Compounds	Y	N	
R	A10	Mercury and Mercury Compounds	Y	N	
R	A11	Nickel	Y	N	
R	A17	Tributyl Tin Oxide （TBTO、CAS.No.56-35-9)	Y	N	
R	A28	Tri-substiituted organostannic compounds	Y	N	
R	A23	Dibutyltin (DBT) compounds	Y	N	
R	A24	Dioctyltin (DOT) compounds	Y	N	
I	A19	Beryllium Oxide (CAS No. 1304-56-9)	Y	N	
R	B02	Polybrominated Biphenyls (PBBs)	Y	N	
R	B03	Polybrominated Diphenyl ethers (PBDEs)	Y	N	
I	B08	Brominated flame retardants (other than PBBs,PBDEs, or HBCDD)	Y	N	
I	B18	Chlorinated flame retardants	Y	N	
R	B05	Polychlorinated Biphenyls (PCBs) and specific substitutes (See Annex B of JIG-101 Ed 4.1)	Y	N	
R	B15	Polychlorinated Terphenyls (PCTs)	Y	N	
R	B06	Polychlorinated Naphthalenes (more than 3 chlorine atoms)	Y	N	
R	B12	Perchlorates	Y	N	
R	B13	Perfluorooctane sulfonate (PFOS)	Y	N	
R	B10	Fluorinated greenhouse gases (PFC, SF6, HFC)	Y	N	
I	B19	Polyvinyl Chloride (PVC) and PVC Copolymers	Y	N	
R	C01	Asbestos	Y	N	
R	C02	Azocolourants and azodyes which form certain aromatic amines	Y	N	
R	C04	Ozone Depleting Substances	Y	N	
R	C06	Radioactive Substances	Y	N	
R	C07	Formaldehyde	Y	N	
R	C08	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl) (CAS No. 3846-71-7)	Y	N	
R	C09	Selected Phthalates Group 1(BBP, DBP, DEHP)	Y	N	
R	C10	Selected Phthalates Group 2(DIDP, DINP, DNOP)	Y	N	
R	C11	Dimethyl fumarate (CAS# 624-49-7)	Y	N	
R	C47	Di-isodecyl phthalate (DIDP)	Y	N	
R	C48	Di-n-hexyl Phthalate (DnHP)	Y	N	

Contained substance group - detailed information < Level 2 > Page 2/5

Classification No.	Intended use classification code	Purpose of use/Intended use	Application area	Maximum content rate(ppm)	Additional information on material composition of products
A05					
A07					
A09					
A10					
A11					
A17					
A28					
A23					
A24					
A19					
B02					
B03					
B08					
B18					
B05					
B15					
B06					
B12					
B13					
B10					
B19					
C01					
C02					
C04					
C06					
C07					
C08					
C09					
C10					
C11					
C47					
C48					

Criteria	Classification No.	CAS No.	EC No.	Substance name	Content Flag(Y/N)		Intended use classification code	Compound content per surveying unit (mg)	Purpose of use/Intended use	Application area	Weight concentration per surveying unit (%)	Additional information on material composition of products
R	A17	56-35-9	200-268-0	Tributyl Tin Oxide (TBTO)	Y	N	A17-J-					
R	A20	1303-28-2	215-116-9	Diarsenic Pentoxide	Y	N	A20-J-					
R	A21	1327-53-3	215-481-4	Diarsenic Trioxide	Y	N	A21-J-					
R	B11	25637-99-4	247-148-4	Hexabromocyclododecane (HBCDD) and all major diastereoisomers	Y	N	B11-J-					
		3194-55-6	221-695-9									
		134237-50-6	-									
		134237-51-7	-									
		134237-52-8	-									
R	B09	85535-84-8	287-476-5	Shortchain Chlorinated Paraffins (C10 - C13)	Y	N	B09-J-					
R	B16	115-96-8	204-118-5	Tris (2-chloroethyl) phosphate (TCEP)	Y	N	B16-J-					
R	C12	117-81-7	204-211-0	Di(2-ethylhexyl) phthalate (DEHP)	Y	N	C12-J-					
R	C13	84-74-2	201-557-4	Dibutyl phthalate (DBP)	Y	N	C13-J-					
R	C14	85-68-7	201-622-7	Butylbenzyl phthalate (BBP)	Y	N	C14-J-					
R	A22	7646-79-9	231-589-4	Cobalt dichloride (CoCl2)	Y	N	A22-J-					
R	A25	7758-97-6	231-846-0	Lead chromate	Y	N	A25-J-					
R	A26	12656-85-8	235-759-9	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	Y	N	A26-J-					
R	A27	1344-37-2	215-693-7	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	Y	N	A27-J-					
R	C15	84-69-5	201-553-2	Diisobutyl phthalate (DIBP)	Y	N	C15-J-					
R	C16	-	-	Refractory Ceramic Fibres, Aluminosilicate	Y	N	C16-J-					
R	C17	-	-	Refractory Ceramic Fibres, Zirconia Aluminosilicate	Y	N	C17-J-					
R	C18	10043-35-3	233-139-2	Boric acid	Y	N	C18-J-					
		11113-50-1	234-343-4	Boric acid	Y	N						
R	C19	1303-96-4	-	Disodium tetraborate decahydrate	Y	N	C19-J-					
		1330-43-4	215-540-4	Disodium tetraborate, anhydrous	Y	N						
		12179-04-3	-	Disodium tetraborate, pentahydrate	Y	N						
R	C20	12267-73-1	235-541-3	Tetraboron disodium heptaoxide, hydrate	Y	N	C20-J-					

Criteria	Classification No.	CAS No.	EC No.	Substance name	Content Flag(Y/N)		Intended use classification code	Compound content per surveying unit (mg)	Purpose of use/Intended use	Application area	Weight concentration per surveying unit (%)	Additional information on material composition of products
R	C21	71888-89-6	276-158-1	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	Y	N	C21-J-					
R	C22	68515-42-4	271-084-6	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	Y	N	C22-J-					
A	B17	548-62-9	208-953-6	4-[4,4'-bis(dimethylamino) benzhydrylidene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	Y	N	B17-J-					
R	A29	7789-06-2	232-142-6	Strontium chromate	Y	N	A29-J-					
R	B20	101-14-4	202-918-9	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	Y	N	B20-J-					
R	A30	11103-86-9	234-329-8	Potassium hydroxyoctaoxodizincate dichromate	Y	N	A30-J-					
R	A31	49663-84-5	256-418-0	Pentazinc chromate octahydroxide	Y	N	A31-J-					
R	C23	117-82-8	204-212-6	Bis(2-methoxyethyl) phthalate	Y	N	C23-J-					
R	C24	140-66-9	205-426-2	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	Y	N	C24-J-					
R	C25	111-96-6	203-924-4	Bis(2-methoxyethyl) ether	Y	N	C25-J-					
R	C26	127-19-5	204-826-4	N,N-dimethylacetamide (DMAC)	Y	N	C26-J-					
R	B23	1163-19-5	214-604-9	Decabromodiphenyl ether	Y	N	B23-J-					
R	A48	62229-08-7	263-467-1	Sulfurous acid, lead salt, dibasic	Y	N	A48-J-					
R	C38	112-49-2	203-977-3	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	Y	N	C38-J-					
R	A49	12141-20-7	235-252-2	Trilead dioxide phosphonate	Y	N	A49-J-					
R	C39	110-71-4	203-794-9	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	Y	N	C39-J-					
R	C40	60-09-3	200-453-6	4-Aminoazobenzene	Y	N	C40-J-					
R	A50	12202-17-4	235-380-9	Tetralead trioxide sulfate	Y	N	A50-J-					
R	A51	1314-41-6	215-235-6	Orange lead (lead tetroxide)	Y	N	A51-J-					
R	A52	8012-00-8	232-382-1	Pyrochlore, antimony lead yellow	Y	N	A52-J-					
R	A53	12065-90-6	235-067-7	Pentalead tetraoxide sulphate	Y	N	A53-J-					

Criteria	Classification No.	CAS No.	EC No.	Substance name	Content Flag(Y/N)		Intended use classification code	Compound content per surveying unit (mg)	Purpose of use/Intended use	Application area	Weight concentration per surveying unit (%)	Additional information on material composition of products
R	C41	629-14-1	211-076-1	1,2-Diethoxyethane	Y	N	C41-J-					
R	C42	1303-86-2	215-125-8	Diboron trioxide	Y	N	C42-J-					
R	A54	683-18-1	211-670-0	Dibutyltin dichloride (DBTC)	Y	N	A54-J-					
R	A55	20837-86-9	244-073-9	Lead cynamidate	Y	N	A55-J-					
R	C43	68-12-2	200-679-5	N,N-dimethylformamide	Y	N	C43-J-					
R	A56	68784-75-8	272-271-5	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped	Y	N	A56-J-					
R	C44	84777-06-0	282-032-2	1.2-Benzenedicarboxylic acid, dipentylester, branched and linear	Y	N	C44-J-					
R	C45	605-50-5	210-088-4	Diisopentylphthalate (DIPP)	Y	N	C45-J-					
R	C46	776297-69-9	-	N-pentyl-isopentylphthalate	Y	N	C46-J-					
R	A57	12060-00-3	235-038-9	Lead titanium trioxide	Y	N	A57-J-					
R	A58	12626-81-2	235-727-4	Lead titanium zirconium oxide	Y	N	A58-J-					
R	A59	12036-76-9	234-853-7	Lead oxide sulfate	Y	N	A59-J-					
R	A60	69011-06-9	273-688-5	[Phthalato(2-)]dioxotrilead	Y	N	A60-J-					
R	A61	12578-12-0	235-702-8	Dioxobis(stearato)trilead	Y	N	A61-J-					
R	A62	91031-62-8	292-966-7	Fatty acids, C16-18, lead salts	Y	N	A62-J-					
R	A63	10099-74-8	233-245-9	Lead dinitrate	Y	N	A63-J-					

END

Published by the domestic VT62474 (JPNC)