

6-3. The marking for presence of the specific chemical substances for electrical and electronic equipment

Due to the amendment of the standards of judgment of “Specified Reuse-Promoted Products” on “Law for the Promotion of Effective Utilization of Resources”, when using more than reference percentage content of specified target chemical substances (6 substances including Lead, Mercury, Cadmium, Hexavalent chromium, PBB, PBDE) in target products (7 items including television sets, refrigerators, washing machines, unit-type air conditioners, microwave ovens, clothes driers, and personal computers), the “content mark” is required on equipments, equipment packaging boxes, and catalogs, based on “Marking for presence of the specific chemical substances for electrical and electronic equipment”(J-Moss) of JIS C 0950:2005, and the information of applied substances and contained parts must be published on manufacturers’ websites.

Moreover, according to the same JIS, when the content amount of specified target substances is less than the reference percentage content, or when applicable to “matters exempted from content marking”, optional “green mark” is appearing on “Annex D (informative)”. When the content applies to “matters exempted from content marking”, it is required to provide this information on their company’s website.

(1) Explanation on “content mark” and “green mark”




Specified target chemical substances and their reference percentage content required by “Marking for presence of the specific chemical substances for electrical and electronic equipment” of JIS C 0950:2005 are presented in Table 6-3-1, and the outline of “content mark” and “green mark” in Table 6-3-2.

As the green mark is not a mark which is designated under the law, the Japan Electronics and Information Technology Industries Association (JEITA) has made a trademark registration (registration No. 4972757) due to clarify its foundation. The logo of the content mark can be downloaded from the websites of Japanese Industrial Standards Committee (JISC) and JEITA.

Table 6-3-1. Specific chemical substances and reference percentage content

Specific chemical substances	Chemical substance symbol	Substances to be calculated	Reference percentage content wt%
Lead and lead compounds	Pb	Lead	0.1
Mercury and mercury compounds	Hg	Mercury	0.1
Cadmium and cadmium compounds	Cd	Cadmium	0.01
Hexavalent chromium compounds	Cr(VI)	Hexavalent chromium	0.1
Polybromobiphenyls	PBB	Polybromobiphenyls	0.1
Polybromodiphenyl ether	PBDE	Polybromodiphenyl ether	0.1

Table 6-3-2. Outline of "Content mark" and "Green mark"

Item	Content mark (Orange mark)	Green mark (Marking for absence of specific chemical substances)	
Logo mark			
Meaning	<ul style="list-style-type: none"> - The percent content of the specific chemical substance to be calculated is exceeding the reference percentage content. 	<ul style="list-style-type: none"> - The percentage content of all the substances to be calculated is not exceeding the reference percentage content. Or some of the substances to be calculated fall into the category of the exception of content marking and percent content of the other substances are not exceeding the reference percentage content. 	
Marking location	<ul style="list-style-type: none"> - Marking should be made on equipment body (every pieces of equipment body, if there are more than one), catalog, instruction manual and your own website. - The marking shall be located on a position when description of equipment type or the like can be confirmed at the same time. 	<ul style="list-style-type: none"> - Not specifically stipulated. 	Refer to (3) for marking examples of equipment body recommended by this committee.
Size	<ul style="list-style-type: none"> - The size of marking shall be adjusted appropriately according to sizes of objects to be marked so that it may be accurately confirmed. - Width should be 15 mm or more. 	<ul style="list-style-type: none"> - The size of the marking shall be adjusted appropriately according to sizes of objects to be marked so that it may be accurately confirmed. 	
Color	<ul style="list-style-type: none"> - The color of the mark shall be yellow-red (representative color code is 2.5YR 5.5/13) specified in the table 1 of JIS Z 8102 and care shall be taken for distinction from the background color. - If it is impossible to use the specified color due to limit on printing or the like, an easily distinguishable color (complementary color of background or the like) may be used other than green system. 	<ul style="list-style-type: none"> - The color of the mark shall be green (representative color code is 2.5G 6.5/10) specified in the table 1 of JIS Z 8102 and care shall be taken for distinction from the background color. - If it is impossible to use the specified color due to limit on printing or the like, an easily distinguishable color (complementary color of background or the like) may be used other than yellow red system. 	
Marking on the catalogues, etc and the instruction manual	<ul style="list-style-type: none"> - In marking on catalogue and the like, names of contained chemical substances should be marked as a part of the mark at the bottom (or on the right). The height of chemical substance symbol shall be not less than 1/6 of the mark height using chemical symbols.  <ul style="list-style-type: none"> - Marking URL providing information on contents of specific chemical substances 	<ul style="list-style-type: none"> - Marking can be performed freely. 	
Marking on website	<ol style="list-style-type: none"> 1) The content conditions in coarse classification by unit (cabinet, mounting substrate, etc) or the like shall be described for each chemical substance symbol. 2) The situation of contents of chemical substances shall be described according to the followings. <ol style="list-style-type: none"> a. When the percentage content of the substance is exceeding the reference percentage content, "numerical value of percentage content (wt %)", "exceeding 0.1wt%" or "exceeding 0.01wt%" shall be described. b. When the situation falls under the category of the exempted items specified in JIS C 0950, "exempted item" should be marked. c. Standard number: JIS C 0950 3) When percentage content of the substance is not exceeding the reference percentage content, "O" or "Below the reference percentage content" can be marked. 4) When use website is impossible, use other media such as FAX and CD-ROM to provide information. <p>(2) is an example of information given on website.</p>	<ul style="list-style-type: none"> - When the situation corresponds to the exemption, follow the items 1) and 2) on the left and "exempted item" shall be entered. 	

(2) Examples of offering information on website

Example 1. Example of marking content conditions when the substances to be calculated have a value exceeding the respective percentage contents

Equipment name: Television receiver Type designation: ○○-AAA

Coarse classification	Chemical substance symbol					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Mounting substrate	Exceeding 0.1 wt%	○	○	○	○	○
Cabinet	○	○	Exceeding 0.01 wt%	○	○	Exceeding 0.1 wt%
Cathode-ray tube	Exemption	○	○	○	○	○
speaker	○	○	○	Exceeding 0.1 wt%	○	○
NOTE 1 “Exceeding 0.1wt%” and “Exceeding 0.01wt%” indicate that the percentage content of the substance to be calculated is exceeding the reference percentage content. NOTE 2 The “○” indicates that the percentage content of the substance to be calculated is not exceeding the reference percentage content. NOTE 3 The “exemption” indicates that the substance to be calculated corresponds the exemption from content marks JIS C 0950						

Example 2. Example of marking on table for such case that some substances to be calculated correspond to exemption from content mark and percent contents of other substances to be calculated are not exceeding the respective reference percentage contents.

Equipment name: Television receiver Type designation: ○○-BBB

Coarse classification	Chemical substance symbol					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Mounting substrate	○	○	○	○	○	○
Cabinet	○	○	○	○	○	○
Cathode-ray tube	Exemption	○	○	○	○	○
speaker	○	○	○	○	○	○
NOTE 1 The “○” indicates that the percentage content of the substance to be calculated is not exceeding the reference percentage content. NOTE 2 The “exemption” indicates that the substance to be calculated corresponds the exemption from content marks JIS C 0950						

Example 3. Example of such case that some of substances to be calculated correspond to exemption from content mark and that percentage contents of other substances to be calculated are not exceeding the relevant reference percentage contents; is marked by writings

Equipment name: Television receiver Type designation: ○○-BBB

Only Pb included in cathode-ray tube corresponds to exemption from content mark (**JIS C 0950**)

(3) Example of the marking of green mark on equipments (face plate)

Following is the example of recommended marking of the green mark on the equipment (face plate) for the purpose of providing information on recycle to recyclers (home appliance recycling plants).

[Marking parts] (1 to 3 in order of priority)

1. Towards the right or lower part of the marking of equipment model (face plate*)
 2. Optional part on face plate
 3. Near the face plate on equipment body
- However, in case of refrigerators, it is recommended to have labels with environmental information (face plate with types of cooling or insulating blowing gas sealed in the back of the equipment body) also.
 - As for air conditioners, it is recommended to put labels on both indoor and outdoor units.
 - As for other products, it is recommended to put a label on each unit when the products are composed by several units and each unit has a face plate.
- * Represents various types of labels such as product quality label plate which describes technology or quality of equipments, or specification and information on environment, etc.,

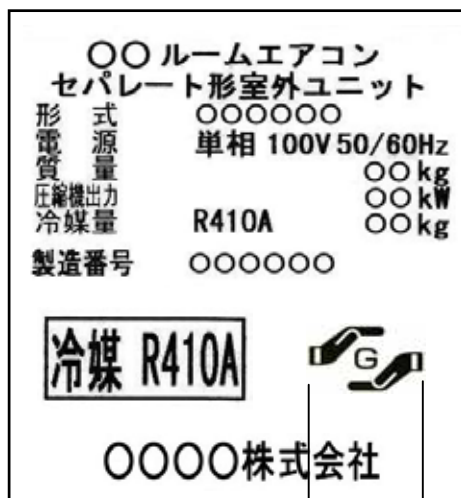
[Marking methods] (Any of the following method should have specification will not easily allow the printing to disappear until disposal stage)

1. Print
2. Mold
3. Label, etc.

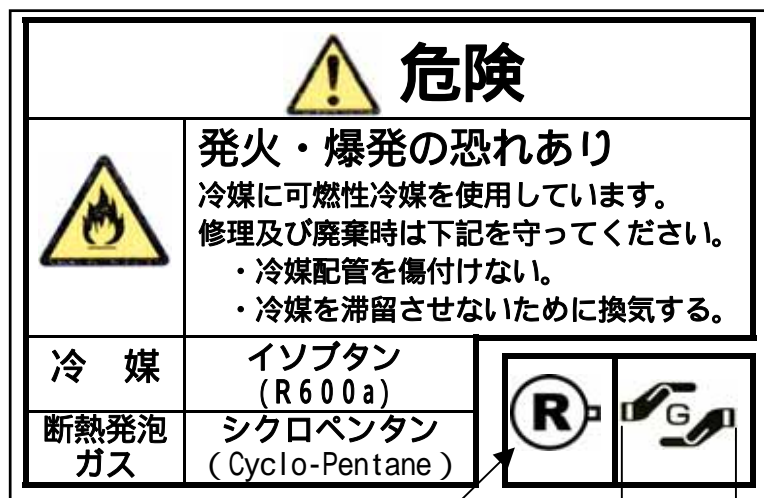
[Marking dimensions]

The size of symbols should be large enough to be confirmed precisely depending on the size of the target item. Over 15mm wide (same as JIS C 0950 “content marking”) is recommended. However, the size should be large enough to be visually observed accurately in case of molding.

[Example of marking]



Example 1. Example of marking on the face plate of outdoor unit of air conditioner
(It is recommended to mark the face place on indoor unit also.)



Example 2. Example of marking on the face plate on the back of refrigerator

Section 6 “6-2(1)” “Symbols to show the direction of the compressor’s refrigerant enclosing pipe”