**JAMP Object substances list**

- JAMP object substances are the substances regulated by the following regulations and will be revised based on JAMP members agreement if necessary.

<table>
<thead>
<tr>
<th>Japanese laws</th>
<th>European laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical control act (the 1st specified substances)</td>
<td>2002/95/EC (RoHS directive)</td>
</tr>
<tr>
<td>Industrial safety and health law (production prohibition substances)</td>
<td>2000/53/EC (ELV directive)</td>
</tr>
<tr>
<td>Poisonous and deleterious substances control law (the specified poisonous substances)</td>
<td>67/548/EEC (Annex 1, CMR-Cat1,2)</td>
</tr>
<tr>
<td></td>
<td>76/769/EEC (other than 67/548/EEC, Annex 1, CMR-Cat1,2)</td>
</tr>
</tbody>
</table>

Please see the details on JAMP website for your reference.

---

**2(3),(4) Description criteria and disclosure scope of the contained substance contained in product**

- You can judge JAMP object substance is *contained* in the product if the following condition 1 or 2 applies.
  1. JAMP object substance is added or contained intentionally
  2. It is well known that JAMP object substance is added or contained.

- In case of applying 1, you should describe “JAMP object substance is contained “. Also you should add and transfer the following subjects information of the substance.
  - A: substance name
  - B: CAS number
  - C: concentration (wt% or ppm)
  - D: object criteria (e.g. regulation)

  note: You need not describe the above A-D information of any ingredients other than the object substance.

- In case of not applying 1, you should describe “JAMP object substance is not contained “.

- As for the information of any ingredients other than intentionally added ingredients, the industries which offer MSDS plus should describe and transfer it voluntarily and kindly in consideration with the concern for downstream firm, manufacturing method, containing possibility and the due date of information transferring.
2(5) how to judge whether the ingredient falls under JAMP object substance (regulated substance)

- The industry which receives MSDS plus shall judge whether the each ingredient in his product falls under the legally regulated substance or the object substances based on industrial standards.
- MSDS plus shall describe whether each ingredient of substance and/or preparation falls under JAMP object substances.
- The object substance in article may exempt from the regulations because chemical and/or physical change may occur when changing from substances and/or preparations to articles.
- The object substance in article may exempt from the regulations in accordance with usage and use condition of article or finished product.

3 MSDS plus format usage and offering obligation

- Transferring information through MSDS plus is not your obligation.
- But it is desirable because MSDS plus format is standardized based on agreement with whole supply chain players.
- MSDS plus developer has only to offer when he received the request. Also he can offer it without request.
4 limitation of applying stricter criteria

- In principle, applying stricter criteria to the existing MSDS plus criteria, especially object substance criteria, is prohibited.
- If applying stricter criteria is necessary, you shall request JAMP secretary to revise the applicable criteria.
- After receiving the above request, JAMP MSDS plus/object substances revision committee will study how to tackle the problem.

5 parallel use of MSDS and MSDS plus

- In principle MSDS should be supplied with MSDS plus.
- However it is accepted that MSDS is not supplied with MSDS plus if providing MSDS is not mandatory.
- If MSDS describes all the content of MSDS plus, MSDS developer should describe as such in the remarks column and/or the 16th chapter of MSDS before transferring it.
MSDS plus preparation general flow chart

 Issuing request from inside and outside of industry

 Judgment if it falls under substance/preparation or article

 ↓ if it falls under substance/preparation

 Download of MSDS plus format

 Identification of product composition

 Judgment if each ingredient is subject to managed object

 Judgment if all ingredients fall under object substance

 ↓ if all ingredients do not fall under object substance

 Report of Not-containing object substance

 Download of AIS format

 You can use it but you need to confirm the scope.

 Preparation supporting tool

 Report of applicable ingredients

 If there exists applicable ingredients

JAMP

Starting MSDS plus usage

Example of concrete implementation procedures

1 downloading essential documents from JAMP website and training/trial

2 establishment of handling policy/ company rule and holding an explanatory meeting

3 investigation of ingredients information which are contained in own brand product/ raw material

4 investigation/ organization of the existing object substances information contained in products

5 cooperation request to suppliers/ customers (document preparation/ request)

6 information offering request to suppliers by using MSDS plus

7 information offering to customers by using MSDS plus and MSDS

8 pool and management of information which is already collected and offered

9 participation of JAMP seminar and collecting information in the future

10 adaptation to AIS and management guideline in the future
Future activity

- Updating of management object criteria
  - response associated with the publication of REACH SVHC list

- Updating of preparation supporting tools

- Global response
  - adaptation to various languages

MSDS plus format

- The format to clarify inclusion of JAMP object substances
- Complement MSDS information
  - Up-stream firms provide it on a voluntary basis
- Transfer the following information to middle-stream and down-stream firms (finished product manufacturers)
  - Relevant standard
    - “contain” or “not contain”
  - Substance name
  - CAS number
  - concentration
1. Product and Company Information

- **Product Name**: Not mandatory (blank is accepted)
- **Product Code**: Not mandatory (blank is accepted)
- **Generic Name**: Not mandatory (blank is accepted)
- **Supplier Identification**: Not mandatory (blank is accepted)
- **Company Code**: Not mandatory (blank is accepted)
- **Address**: Not mandatory (blank is accepted)
- **Contact Point**: Not mandatory (blank is accepted)
- **Phone Number**: Not mandatory (blank is accepted)
- **Fax Number**: Not mandatory (blank is accepted)
- **E-mail Address**: Not mandatory (blank is accepted)
- **Authoring Division**: Not mandatory (blank is accepted)
- **Phone Number**: Not mandatory (blank is accepted)
**Product and Company Information**

- **Product name**: Name should be the same as that specified in the MSDS
  - **Product Code**: Write the item number or serial number of the product to specify the product
    (Not the customer’s specified product number of your product)
    > Leave this place blank if no management number is provided for the product
  - **Generic Name**: Name should be the same as that specified in the MSDS
    (Example: Polypropylene, adhesive agent for rubber etc.)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>○○○○○○○</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code</td>
<td>△△△△△△△</td>
</tr>
<tr>
<td>Generic Name</td>
<td>△△△△△△△</td>
</tr>
<tr>
<td>Supplier Identification</td>
<td></td>
</tr>
<tr>
<td>Company Code</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Contact Point</td>
<td></td>
</tr>
</tbody>
</table>

---

- **Company Name**: Name should be the same as that specified in the MSDS
  - **Company Code**: Identification of your company such as EDI code or DUNS number
    (Not the customer’s specified company code of your company)
    > Leave this place blank if no number has been provided
  - **E-mail Address**: Write the pilot e-mail address of the division in charge of MSDSplus preparation or management
    > Leave this place blank if the division has no e-mail address
  - **As needed**, write the name of the MSDSplus authoring division

<table>
<thead>
<tr>
<th>Supplier Identification</th>
<th>XXXXX Co., Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Code</td>
<td>XXXXX Co., Ltd.</td>
</tr>
<tr>
<td>Address</td>
<td>1234 XXXX, Tokyo, Japan</td>
</tr>
<tr>
<td>Contact Point</td>
<td>XXXXX Division</td>
</tr>
<tr>
<td>Phone Number</td>
<td>00-1234-5678</td>
</tr>
<tr>
<td>Fax Number</td>
<td>00-8765-4321</td>
</tr>
<tr>
<td>E-mail Address</td>
<td></td>
</tr>
<tr>
<td>Authoring Division</td>
<td></td>
</tr>
<tr>
<td>Phone Number</td>
<td></td>
</tr>
</tbody>
</table>
Substance Information

- Relevant Standards: Relevant laws and regulations, Self-restrictions (JGPSSI, GADSL etc.)
- Substance(s) to be notified: Targeted substance of the relevant laws, regulations and self-restrictions

Substance(s) To Be Notified

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Conc.</th>
<th>Relevant Standard 01</th>
<th>Relevant Standard 02</th>
<th>Relevant Standard 03</th>
<th>Relevant Standard 04</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>JP01</td>
<td>JP02</td>
<td>JP03</td>
<td>EU04</td>
<td></td>
</tr>
</tbody>
</table>

If you have been informed that a substance to be notified is “intentionally added” or “known to be contained” in a product, specify the following sentence in the Substance Information space:

“This product contains the following substance(s) listed in the relevant standard and to be notified.”

In addition, present information on the substance(s) in the list below the Substance Information space. Otherwise, specify in the same column

“This product contains no substances in the relevant standard and to be notified.”

The phrase “known to be contained” here means that it is clear that a substance to be notified is contained in a product because, “the material supplier informed you that a substance to be notified is contained therein” or “you confirmed data that shows that a substance to be notified is contained in the product in some manner.”

The number of list lines can be decreased or increased as needed.

This product contains no substances in the relevant standard and to be notified.
### Substances Information

- If the substances fell under the criteria of “Substances To Be Notified”,
  - Please fill in “This product contains substances which fall under the criteria of Substances To Be Notified.
  - Describe the substances information in the following table.

#### Table: Substances Information

<table>
<thead>
<tr>
<th>Substance(s) To Be Notified</th>
<th>Relevant Standard</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>CAS No.</td>
<td>Conc.</td>
</tr>
<tr>
<td>XXX-XX-X ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Chemical Name:** Please fill it in under the relevant standard.
- **CAS No.:** Please fill in the CAS No listed in “Relevant Standard”.
- **Conc.:** Regardless of threshold, please fill in the value you have.
- **If there are any remarks, e.g. use information etc...**

---

### CAS No, Concentration

- **CAS No.:** Please fill in the CAS No listed in “Relevant Standard”.
  - In the following cases, please fill in “-”, and describe the explanation in the remarks.
    1. If there are no CAS No.
    2. If there multiple CAS Nos.
    3. If the CAS No was different, due to isomers.
    4. If the CAS No was defined by Relevant Standard.

- **Concentration**
  1. If the concentration is unique, :
  2. If there is a range in concentration, :
  3. If the concentration is limited by a ceiling, :
     - Unit is wt% or ppm
     - effective digit and digit number are decided considering relevant standard on a case-by-case basis.
Relevant Standard Information

- Relevant Standard Information: Relevant substances regulations, self-imposed controls (JGPSSI, GADSL etc…)
  - Some regulations and self-imposed controls which could be necessary of provision of information.
  - This standard would be review based on legal changes and internationalization.

- Issued or revised: Revised and amended date of regulations
  - The creator must have a responsibility of regulatory compliance by itself.
  - JAMP provides referential relevant substances information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Relevant Standard Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP01</td>
<td>Japanese Chemical Substances Control Law (Class I Specified Chemical Substances)</td>
</tr>
<tr>
<td>JP02</td>
<td>Industrial Safety and Health Act (Substances Prohibited of Manufacturing etc.)</td>
</tr>
<tr>
<td>JP03</td>
<td>Poisonous and Deleterious Substances Control Law (Spesified Poisonous Substances)</td>
</tr>
<tr>
<td>EU01</td>
<td>2002/95/EC (RoHS Directive)</td>
</tr>
<tr>
<td>EU02</td>
<td>2000/53/EC (ELV Directive)</td>
</tr>
<tr>
<td>EU03</td>
<td>67/548/EEC [Annex I CMR—Cat1,2]</td>
</tr>
<tr>
<td>EU04</td>
<td>76/769/EEC [other than 67/548/EEC Annex I CMR—Cat1,2]</td>
</tr>
</tbody>
</table>

If you get MSDS plus, how to handle this information?

- Consistent with the material information in AIS or green procurements.

  JAMP MSDSplus

  This sheet provides supplemental chemical information of our product not covered by MSDS. Please refer to this sheet associating with MSDS.

  **Product Name**: xxxxxx
  **Material Name**: C3602BD
  **Weight**: 100g

<table>
<thead>
<tr>
<th>Substances(s) To Be Notified</th>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Conc. Unit</th>
<th>Relevant Standard(s)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>JP01</td>
<td>xxx</td>
</tr>
</tbody>
</table>

  This product contains lead and lead compound are contained in 3%, so 100(g) x 0.03 = 3(g)

  This information would be useful for integration of whole materials in product, and compliance check.
Appendix 3

Presentation of JAMP AIS
Outline of JAMP Activities and JAMP AIS

Information transfer on chemical substances contained in products in the supply chain

Problems of information transfer on chemical substances contained in products in the supply chain

i) No scheme to transfer information of chemical substances contained in article
   → Conspicuous economic burdens in responding to individual procurement surveys

ii) No common rules to manage chemical substances contained in articles
    → Lowering the confidence of the survey information, locus of responsibility is unclear

JAMP believes developing and promoting the following schemes are the urgent task

- The scheme to transfer the information of chemical substances which can be used to comply with the international regulations
- The scheme to transfer the information of chemical substances contained in the products which can be used between worldwide industries

JAMP will propose a cross-industrial scheme to declare and to communicate the information contained in the products to solve such problems and also to correspond to REACH.
To promote the usage of JAMP’s common tools, JAMP will develop a scheme to achieve the following goals.

- to facilitate smooth and appropriate information transfer about chemical substances contained in the products in the supply chain
- to promote and support the information management on chemical substances to small & medium industries of middle-stream users that manufacture, sell and by the articles.

Basic policies of JAMP’s scheme is as follows;

1) Use JAMP MSDSplus and JAMP AIS for the information transfer
2) Transfer the latest information with grounds as soon as possible
JAMP requests upstream users to use JAMP MSDSplus as a tool to transfer information of chemical substances contained in product to middle stream users.

JAMP requests middle stream users to use AIS as a tool to transfer information of chemical substances contained in articles to downstream users.

Middle stream users prepare the AIS based on the information from MSDS or MSDSplus.

AIS should be provided free of charge.

AIS considers mediation to the existing schemes.

### Relationship between JAMP MSDSplus and JAMP AIS

<table>
<thead>
<tr>
<th>Chemical Manufacturers (Upstream users)</th>
<th>Transfer the chemical information by using MSDS and JAMP MSDSplus to the middlestream users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parts Manufacturers (Middlestream users)</td>
<td>Make AIS based on the information from MSDS and JAMP MSDSplus and transfer the chemical information by using AIS to the downstream users</td>
</tr>
<tr>
<td>Final Product Manufacturers (Downstream users)</td>
<td>Manage the chemical information contained in the products based on the information from AIS</td>
</tr>
</tbody>
</table>

Chemical and physical change may occur during the converting process of substances/preparations to articles (Necessary AIS information will not be communicated unless the chemical substance management of this process is performed adequately.)
Outline of JAMP MSDSplus (ver.2)

JAMP has developed 2 kinds of format sheets to transfer the information of substances contained in the products.

1. JAMP MSDSplus
   > from upstream users to middle stream users to

2. JAMP AIS
   > from middle stream users to upstream users

JAMP MSDSplus is used to transfer the information of chemical substances contained in the chemical products.

Actual JAMP MSDSplus is as shown in the right.

The main points of JAMP MSDSplus ver.2

<table>
<thead>
<tr>
<th>Declarable information</th>
<th>MSDS</th>
<th>MSDSplus</th>
</tr>
</thead>
<tbody>
<tr>
<td>To whom?</td>
<td>Employers for each hazardous chemical present in their workplace.</td>
<td>The downstream companies asked for the provision of information</td>
</tr>
<tr>
<td>Contents level</td>
<td>The level which Employers for each hazardous chemical present in their workplace can utilize for their health protection.</td>
<td>The level which stakeholders in the whole supply chain can understand and make transmitted to downstream companies.</td>
</tr>
<tr>
<td>Criteria</td>
<td>National regulatory laws/Public standards</td>
<td>Substances which are based on scientific evidence and on which the parties concerned in the whole supply chain can reach a consensus are selected and revisions are made on a regular basis.</td>
</tr>
</tbody>
</table>
**The main points of JAMP MSDSplus ver.2**

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Product name, generic name etc…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Identification</td>
<td>Company name, address, tel, etc…</td>
</tr>
<tr>
<td>Substance Information (The notification whether includes declarable substances or not in your product.)</td>
<td>① The notification whether includes or not in a product. ② If included, you have to notify following substances information. (In not included, it’s not necessary to fill in it) Substance name, CAS No, concentration, covered laws and regulations. Note: The criteria whether included or not included. (to be terminated under the following circumstances) a. Substances listed in the relevant standard are added intentionally. b. The inclusion of substances listed in the relevant standard has known by any way. c. When the information of substances is not known, no need to fill in.</td>
</tr>
</tbody>
</table>

**Target Substances under Management are likely to remain so in the foreseeable future.** If needed, these laws and regulations would be revised or modified on the basis of the whole agreement of JAMP.

### Domestic laws in Japan
- Chemical Substances Control Law (Class I Specified Chemical Substances)
- Industrial Safety and Health Law (substances prohibited to be manufactured)
- Poisonous and Deleterious Substance Control Law (specified poisonous substances)

### EU regulations
- 2002/95/EC [Restriction of Hazardous Substances Directive]
- 67/548/EEC (Appendix I, CMR—Cat. 1 and 2)
- 76/769/EEC (67/548/EEC Appendix I, with CMR—Cat. 1 and 2 excluded)

For additional information, please visit our website.
The main points of JAMP MSDSplus ver.2

What is “included”?  
If a substance listed in the relevant standard  
And  
(1) to be notified is intentionally added  
Or  
(2) known to be contained

Substances information except for “intentionally added” should be filled in and transmitted by provider companies of MSDSplus in good faith and voluntarily to downstream companies based on careful studies of process of manufacture, the possibility of included and due date of information transmission.

The final judgment whether included or not

Whether substances in products fall under the category of declarable substances by the laws and regulations or not should be determined by each downstream companies responsibility.

The main points of JAMP MSDSplus ver.2

Restriction on the more stringent standards

To set more stringent standards in MSDSplus should be restricted, especially in the criteria of relevant standard substances.

Concurrent use with MSDS

Information on chemical products such as hazards and measures to prevent accidents is transmitted through the MSDS. The MSDSplus transmits information by supplementing what the MSDS lacks. Therefore, in principle, the MSDS and the MSDSplus should be used together to transmit information.

When the content of the MSDSplus was entered in the MSDS, it is also possible to transmit information only through the MSDS, but it is considered necessary to take account of the response practically made by downstream companies, e.g., transmit that effect to the supply chain by entering it in the remarks column of the MSDSplus or Item 16 of the MSDS.
## The concept of AIS

| **Target** | Articles  
| If articles are original parts, hierarchized sections in AIS in blank. |
| **Information source** | MSDS, MSDSplus, Article information in your own products |
| **Preparer** | Article manufacturer |
| **The contents of information** | Information of Specified Chemical Substances in the Article/Information on Compositional Elements/concentration/material information/substances information which should be determined to declare voluntarily |
| **To whom** | The downstream companies asked for the provision of information |
| **Contents level** | The level which stakeholders in the whole supply chain can understand and make transmitted to downstream companies. |
| **Criteria** | substances which are based on scientific evidence and on which the parties concerned in the whole supply chain can reach a consensus are selected and revisions are made on a regular basis. |

---

## AIS concept

### AIS Information

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Required</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format Version</td>
<td>Yes/No</td>
<td>Yes/No</td>
<td>Version of the document (Y/N)</td>
</tr>
<tr>
<td>Data of Latest Revision</td>
<td>YYYY/MM/DD</td>
<td>YYYY/MM/DD</td>
<td>Date of the latest revision</td>
</tr>
<tr>
<td>GP (Global Portal) Sheet ID</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Issuing Company Information

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Required</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAMP Member Company ID</td>
<td>Yes</td>
<td>JAMP Member Company ID</td>
<td></td>
</tr>
<tr>
<td>Company ID</td>
<td>Yes</td>
<td>Company ID</td>
<td></td>
</tr>
<tr>
<td>Organization ID</td>
<td>Yes</td>
<td>Organization ID</td>
<td></td>
</tr>
<tr>
<td>Industry ID</td>
<td>Yes</td>
<td>Industry ID</td>
<td></td>
</tr>
<tr>
<td>Site Information</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuing Department</td>
<td>Yes</td>
<td>Issuing Department</td>
<td></td>
</tr>
<tr>
<td>Telephone Number of Issuing Department</td>
<td>Yes</td>
<td>Telephone Number of Issuing Department</td>
<td></td>
</tr>
<tr>
<td>FAX Number of Issuing Department</td>
<td>Yes</td>
<td>FAX Number of Issuing Department</td>
<td></td>
</tr>
<tr>
<td>Email Address of Issuing Department</td>
<td>Yes</td>
<td>Email Address of Issuing Department</td>
<td></td>
</tr>
<tr>
<td>Telephone Number of Department in Charge of Preparing AIS</td>
<td>Yes</td>
<td>Telephone Number of Department in Charge of Preparing AIS</td>
<td></td>
</tr>
<tr>
<td>Sheet Reference Number</td>
<td>Yes</td>
<td>Sheet Reference Number</td>
<td></td>
</tr>
</tbody>
</table>

### Article Information

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Required</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer Name</td>
<td>Yes</td>
<td>Manufacturer Name</td>
<td></td>
</tr>
<tr>
<td>Issuing Company Site Number</td>
<td>Yes</td>
<td>Issuing Company Site Number</td>
<td></td>
</tr>
<tr>
<td>Multiple Product name/ Product Series Name</td>
<td>Yes</td>
<td>Multiple Product name/ Product Series Name</td>
<td></td>
</tr>
</tbody>
</table>
### 4. Composition Information

<table>
<thead>
<tr>
<th>Level</th>
<th>Component</th>
<th>Material</th>
<th>Substance</th>
<th>Applicable Regulation or Standard</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Selection of one of the choices is mandatory.

- 0. This article is recognized NOT to contain any declarable substances within the scope of applicable regulations and standards.
- 1. This article is recognized to contain declarable substances within the scope of applicable regulations and standards.

**Note:** This information is integrated and independently transferred from Section 4 "Composition Information".

### 6. Information To Be Declared

#### Article Mass

<table>
<thead>
<tr>
<th>Level Name</th>
<th>Component Name</th>
<th>Material Name</th>
<th>Use</th>
<th>Material Classification</th>
<th>Substance Name</th>
<th>CAS Number</th>
<th>Substance Mass</th>
<th>Concentration (wt%)</th>
<th>Applicable Regulation or Standard</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** This information is compiled based on the entries from sections 1 to 4.

### 7. Specified Chemical Substance Concentration within Article

<table>
<thead>
<tr>
<th>Declarable substance</th>
<th>Substance Name</th>
<th>CAS No.</th>
<th>Concentration within Article</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 8. Total Amounts of Material within Article

<table>
<thead>
<tr>
<th>Material</th>
<th>Classification</th>
<th>Classification</th>
<th>Classification</th>
<th>Material Mass</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** This information is compiled and independently transferred from Section 4 "Composition Information".
AIS structure

Basic information to identify AIS

1. AIS information
   Issuing date, revision date, AIS reference number, language

2. Company information
   Company ID, Issuing company, the window department, reference number

Article information

3. Article information
   Manufacturer, article name, model name

4. Ingredients information
   Weight, hierarchy, number, material, substances to report, voluntary reporting substances, applicable regulations

5. Other information
   Reference documents, restrictions, dos and don'ts

The information which needs to report down-stream company (compiled based on the entries in the section 1-4.)

6. The information which needs to be reported
   Weight, composition, number, material, applicable regulation about the reporting substance

7. the specified chemical substance concentration per an article
   substance name, concentration per an article

8. Material information in an article
   Material, material classification, material weight

(option) client information
   Company name, the person in charge, the model No. indicated by the client and so on
AIS preparation procedure

Receiving a request to publish MSDSplus or AIS

Classifying “preparation or article”

AIS preparation

Identifying product composition

Judgment if each ingredient is the substance which should be reported

Judgment if all ingredients are the substance which should be reported

Report no ingredient is applicable

Report some ingredients are applicable

MSDSplus preparation

It is regarded as article

You may use the below tool but you need to note the scope.

Preparation supporting tool

Integration/simplification tool

It is regarded as substance / preparation

Integration and simplification

Integration

Original component AIS1

Original component AIS 2

Original component 1 AIS + Original component 2 AIS

Simple addition

Simplification

AIS 1

AIS 2

Accumulate AIS1 and AIS2 data by every same material

Reduce the number of composition lines

Data amount compression and organization
The supporting tools

Documents and tools which JAMP can provide and explain you

- AIS version 2.0 format
- AIS version 2.0 preparation procedure manual
- AIS materials list version 2.0
- AIS data input supporting tool (input supporting tool, integration and simplification tool beta version)
- AIS data input supporting tool operation manual
- AIS integration and simplification tool operation manual

The function of the above tools

The above tools are developed in order to support AIS preparation and AIS integration/simplification. They have the function which JAMP aims but are still on the way to be approved as JAMP official tools. Therefore JAMP provides you as a position of beta version.

Material searching function in preparation supporting tool

AIS data input supporting tool has a simple function to search object materials. You can search materials and applicable regulation by using it but JAMP can’t guarantee the searching result is perfect. You shall confirm it by yourself.
Appendix 4

Presentation of Outline of JAMP Activities
Outline of JAMP Activities and Hitachi's Approach Toward REACH

August 18, 2008

Dr. Yoshiaki Ichikawa
Chief Engineer
Corporate Environmental Policy Division
Hitachi, Ltd.

Contents

1. REACH Influence Over Businesses Outside Europe
2. How JAMP Can Help
3. Hitachi's Policy for REACH Compliance
Core Requirements of Our Concern in REACH

Registration, Evaluation, Authorisation, and restriction of Chemicals (REGULATION (EC) No 1907/2006)

Supply-chain information sharing  
(even outside EU)

Phase-in substances  
in the scope

“Article”  
in the scope

Downstream user obligations

Scope of Regulated Chemicals in REACH

(Pre-) Registration is needed to use Chemicals on EINECS List

Existing Substances  
(Phase-in Substances)

New Substances  
(Non-phase-in Substances)

Hazardous Substances

SVHC  
100-1500?

Chemicals and Preparation

Chemicals in Articles

Articles

SVHC ; Substances of Very High Concern
CMR:Carcinogen, Mutagen, Repro Toxic
PBT(Persistent, Bioaccumulative, Toxic )
vPvB (Very Persistent, Very Bioaccumulative )
EDs (Endocrine Disrupters)
"Preparation" in REACH (Raw Materials or Chemicals)

- Ingots
- Bulk materials
- Plastic pellets
- Maintenance chemicals
- Refill oil
- Powder
- Ink in Cartridge
- Ink in Ball-point Pen

"Article" in REACH (Finished Products)

Article: means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition;

- Electrical appliances
- Batteries
- Packaging
- Designed surface
- Sheet
- Brake lining
REACH Requirements Map - Preparation

1. Registration  *Art 6*
   - Only Representative (OR)  *Art# 8*
   - Pre-registration  *Art# 28*
   - SIEF  *Art# 29*

Exchange Information

- SDS  *Art# 31*
- Information without SDS  *Art# 32*

Restriction  *Art# 67*
- Annex XVII list

Almost the same as RoHS in nature

Authorisation  *Art# 56*
- Annex XIV list

Relatively rare cases and not immediate yet

Documentation & Record keeping  *Art# 33*

To be implemented through all the processes

REACH Requirements Map - Articles

1. Notify Substances  *Art 7(1)*
   - Intended release to register
   - Same as registration
   - Notification on SVHC  *Art 7(2)*

2. Exchange Information
   - Information on SVHC  *Art# 33*
   - Candidate list  *Art# 59(1)*

3. Restriction  *Art# 67*
   - Annex XVII list

Almost the same as RoHS in nature

Authorisation  *Art# 56*
- Annex XIV list
Obligations for Exchange Information

**Downstream User of Preparations and Substances**

- Your product needs SDS?
  - Yes: #32(1) Provide downstream
    - Reg. number
    - Identified Use
    - RMM
  - No: #31(1)
- Substances under Authorisation?
  - Yes: #65 Show Authorisation number on the label
  - No: Your product contains SVHC > 0.1%

**Article Producer**

- Your product contains SVHC > 0.1%
  - Yes: Inform your customers
    - Name of the substances
  - No: #33 #7(2) If more than 1ton/y and not registered for your use?

Note: SVHC (Substances of Very High Concern)
Substances meet the criteria in Article 57 and are identified in accordance with Article 59(1), which are also called substances in the “candidate list”

---

Obligations for Notification

**Article Producer or importer**

- Article 7(1)/(2) >1ton/year?
  - Yes: Intentional release?
    - Yes: Article 7(2)b
    - No: SVHC >0.1% ?
      - Yes: Exposure deniable?
        - Yes: Notify to the Agency
          - Company
          - Substance ID
          - Categorization
          - Use
        - No: Article 7(6)
      - No: Already registered for the IU
        - Yes: Article 7(4)
        - No: Article 7(5)
        - If Agency requires: Register
  - No: Article 7(1)

Within six month after the candidate list updated
### Summary for Requirements

<table>
<thead>
<tr>
<th>Chem. /Preparation</th>
<th>Registration</th>
<th>Notification</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 6</td>
<td>Article 7(1)</td>
<td>Article 7(2)</td>
<td>Article 31-33</td>
</tr>
<tr>
<td>&gt;=1 ton/y</td>
<td>---</td>
<td>---</td>
<td>SDS</td>
</tr>
<tr>
<td>&gt;=2% &amp; &gt;=1 ton/y</td>
<td>---</td>
<td>---</td>
<td>Dangerous substances 67/548/EEC 1999/45/EC</td>
</tr>
<tr>
<td>SVHC</td>
<td>---</td>
<td>&gt;1 ton/y</td>
<td>59(1) SVHC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ANNEX XIII PBT, vPvB</td>
</tr>
</tbody>
</table>

* Note: 0.1% SVHC applicable to the article

### SVHC Addressed in REACH

**Recommendations of Priority Substances for Annex XIV (Article 57)**
- CMR category 1 and 2, PBTs and vPvBs, Endocrine Disruptors etc.
- Authorization Candidate List for inclusion in Annex XIV (Article 59)
  - For information communication on substances in articles (Article 33)
- Annex XIV substances for Authorization
- Annex XVII substances for Restrictions (Article 67)

**So called SVHC**
First Consultation for SVHC (candidate list)

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS number</th>
<th>EC number</th>
<th>Authority</th>
<th>Reason for proposing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracene</td>
<td>120-12-7</td>
<td>204-371-1</td>
<td>Germany</td>
<td>PBT</td>
</tr>
<tr>
<td>4,4’- Diaminodiphenylmethane</td>
<td>101-77-9</td>
<td>202-974-4</td>
<td>Germany</td>
<td>CMR</td>
</tr>
<tr>
<td>Dibutyl phthalate</td>
<td>84-74-2</td>
<td>201-557-4</td>
<td>Austria</td>
<td>CMR</td>
</tr>
<tr>
<td>Cyclododecane</td>
<td>294-62-2</td>
<td>206-33-9</td>
<td>France</td>
<td>PBT</td>
</tr>
<tr>
<td>Cobalt dichloride</td>
<td>7646-79-9</td>
<td>231-589-4</td>
<td>France</td>
<td>CMR</td>
</tr>
<tr>
<td>Diarsenic pentoxide</td>
<td>1303-28-2</td>
<td>215-110-6</td>
<td>France</td>
<td>CMR</td>
</tr>
<tr>
<td>Diarsenic trioxide</td>
<td>1327-53-3</td>
<td>215-481-4</td>
<td>France</td>
<td>CMR</td>
</tr>
<tr>
<td>Sodium dichromate, dihydrate</td>
<td>7789-12-0</td>
<td></td>
<td>France</td>
<td>CMR</td>
</tr>
<tr>
<td>5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)</td>
<td>81-15-2</td>
<td>201-329-4</td>
<td>Netherlands</td>
<td>vPvB</td>
</tr>
<tr>
<td>Bis (2-ethyl(hexyl)phthalate) (DEHP)</td>
<td>117-81-7</td>
<td>204-211-0</td>
<td>Sweden</td>
<td>CMR</td>
</tr>
<tr>
<td>Hexabromocyclododecane (HBCDD)</td>
<td>25637-99-4</td>
<td>247-148-4</td>
<td>Sweden</td>
<td>PBT</td>
</tr>
<tr>
<td>Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)</td>
<td>85535-84-8</td>
<td>287-476-5</td>
<td>United Kingdom</td>
<td>PBT</td>
</tr>
<tr>
<td>Bis(tributyltin)oxide</td>
<td>56-35-9</td>
<td>200-268-0</td>
<td>Norway</td>
<td>PBT</td>
</tr>
<tr>
<td>Lead hydrogen arsenate</td>
<td>7784-40-9</td>
<td>232-064-2</td>
<td>Norway</td>
<td>CMR</td>
</tr>
<tr>
<td>Tinhexyl arsenate</td>
<td>15606-95-8</td>
<td>427-700-2</td>
<td>Norway</td>
<td>CMR</td>
</tr>
<tr>
<td>Benzyl butyl phthalate</td>
<td>85-68-7</td>
<td>201-622-7</td>
<td>Austria</td>
<td>CMR</td>
</tr>
</tbody>
</table>

Inquiries from Customers Have Already Come

Substances Of Very High Concern Data Reporting Format

<table>
<thead>
<tr>
<th>Supplier Code</th>
<th>CAS #* where available</th>
<th>Weight (g)* up to 3 decimal places</th>
<th>Description of Use (max field length:50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>101-77-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>81-15-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>85535-84-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athracene</td>
<td>129-12-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzyl butyl phthalate (BBP)</td>
<td>85-66-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bis (2-ethyl(hexyl)phthalate) (DEHP)</td>
<td>117-81-7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Butylbutylylamine (BBA)</td>
<td>56-25-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cobalt dichloride</td>
<td>754-79-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclododecane</td>
<td>294-62-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarsenic pentoxide</td>
<td>1303-28-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarsenic trioxide</td>
<td>1327-53-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dibutyl phthalate (DEP)</td>
<td>84-74-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hexabromocyclododecane</td>
<td>25637-99-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead hydrogen arsenate</td>
<td>7784-40-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium dichromate, dihydrate</td>
<td>7789-12-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinhexyl arsenate</td>
<td>15606-95-8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What Happens in Asian Supply Chain?

Asian market

Company D (Domestic business)

Notify, or Information Article E

Company E

Export

- Containing Sub. A
- Containing Sub. B

Prep. C

Company C

Company B (SVHC)

Company A (SVHC)

Notify, or Information Article E

Article D

Domestic business

Company C

No data?

Sub. B (SVHC)

Notification or Information Register

- Dossier on Sub. A

Company B

Company A

Notify, or Information Article E

Article E

Export

Large Difference in EU and Asia

EU

Register

Notify and/or Information provision on SVHC

Legally ensured information exchange along the supply chain

Export

Asia

Notify/Inform

Products are transferred but no information accompanied
Then, This Is Actually Happening Right Now

EU
Register
Notify and/or Information provision on SVHC

Notify/Inform
Incl. local manufacturing
EU
Register

Asia

Export
Export

No purchasing with no data

Slumping Business

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1. REACH Influence Over Businesses Outside Europe
2. How JAMP Can Help
3. Hitachi’s Policy for REACH Compliance
What JAMP Envisions

Legally ensured information exchange along the supply chain

Notify and/or Information provision on SVHC

This is OK!

Information is exchanged under JAMP voluntary initiative

JAMP: A Cross-sectoral Industry Initiative

JAMP: Joint Article Management Promotion-consortium

Upstream industry

Information transfer with SDS

Middlestream industry

Information transfer with AIS (Article Information Sheet)

Downstream industry

Since Sept 2006 members have been going for a new scheme of supply chain management
JAMP Way of Information Transfer

JAMP
(Joint Article Management Promotion-consortium)

MSDSplus  AIS (Article Information Sheet)

Publicly available ('08.7)  Customer format (e.g. IMDS)

Seamless Data Transfer along The Supply Chains

JAMP Growing Membership

Asahi Kasei Corporation
Kao CORPORATION
Sumitomo Chemical Co., Ltd
Mitsubishi Chemical Corporation
Lion Corporation
FUJIFILM Corporation
Murata Manufacturing Company, Ltd.
DAINIPPON INK AND CHEMICALS, INCORPORATED
TDK Corporation
TOSHIBA Corporation
Hitachi, Ltd.
FUJITSU LIMITED
Ricoh Co., Ltd.
Matsushita Electric Industrial Co., Ltd.
Mitsubishi Electric Corporation
SEIKO EPSON CORPORATION
Mizuho Information & Research Institute, Inc.

MITSUBISHI RAYON CO., LTD.
Nippon Chemi-Con Corporation
Hitachi Chemical Company, Ltd.
NIPPON CHEMICAL INDUSTRIAL Co., LTD.
Nihon Unisys, Ltd.
ALPS ELECTRIC CO., LTD.
Nippon Chemi-Con Corporation
Asahi Glass Co., Ltd.
Towa Kagaku Co., Ltd.
TOKUSHU DENSO CO., LTD
NITTO DENKO CORPORATION
Fujikura Ltd.
Mitsui Chemicals, Inc.
The JAPAN REFRIGERATION AND AIR CONDITIONING INDUSTRY ASSOSIATION
Naitoh Environmental Science Co.,Ltd.
Fuji Xerox Co., Ltd.
Expert for Management Solution Japan Co.,Ltd.
Kurita Analysis Services Co.,Ltd.
BROTHER INDUSTRIES, LTD.
Japan Chemical Database Ltd.
KONICA MINOLTA HOLDINGS,INC.
Chinet LLP
EDS Japan LLC.
Environmental Communication Co.,Ltd.
Nihon Parkerizing Co.,Ltd.
DIKYO CHEMICAL CO., LTD.
E&E Solutions Inc.
Fuji Electric Holdings Co., Ltd
Chemicals Evaluation and Research Institute, Japan
Japan Automobile Manufacturers Association, Inc.
BSEF Japan

Currently over 280 members and still growing
JAMP Main Activities

1) Development and promotion of the "JAMP Guidelines for the Information Management of Chemical Substances Contained in the Products"

2) Development and promotion of two types of format sheets for the transfer of chemical substance information
   (1) JAMP MSDSplus (Material Safety Data Sheet Plus)
   (2) JAMP AIS (Article Information Sheet)

3) Promoting the international standardization regarding on information management of chemical substances contained in the articles (e.g. JAMP Guidelines, JAMP MSDSplus and JAMP AIS)

4) Promoting the development of an information infrastructure for the smooth communication of chemical substance information etc…

The Mechanism of Information Exchange (1)

Declaration style is much simpler

![Diagram showing the comparison between Declaration Style and Survey Style]

- **Declaration Style**: Transactions = 2
- **Survey Style**: Transactions = 20^2 = 40
The Mechanism of Information Exchange (2)

Company E provides MSDSplus

Substance A
Substance B

Preparation E

Company C provides AIS

Substance D
Substance E
Substance F
Substance G

Company D provides MSDSplus

Company B provides AIS

Substance I
Substance J
Substance K
Substance L

Company A provides AIS

No data transferred

Data gap identified

Substance M
Substance N

Preparation C
Substance O
Preparation D

Company G provides AIS

Substance N
Substance T

Preparation E

Company A provides AIS

Substance D
Substance E

Preparation B

Article A (Parts A)

Article B (Parts B)

Article C (Parts C)

Article B (Parts C)

Product A

Product B (Parts F)

Contents

1. REACH Influence Over Businesses Outside Europe
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Group Revenue by Industry Segment

- Information & Telecommunication Systems: 22%
- Electronic Devices: 28%
- Power & Industrial Systems: 10%
- Digital Media & Consumer Products: 12%
- Financial Services: 3%
- Logistics, Services & Others: 15%
- High Functional Materials: 10%

Total Revenue: 100 Billion US$

All figures are included Eliminations and Corporate items, FY2007/Consolidated basis

Hitachi Group Business Overview - Region-

- **Europe**: 106 Companies, 9,468 Employees, 10 B$
- **Japan**: 419 Companies, 251,702 Employees, 60 B$
- **Asia**: 271 Companies, 105,645 Employees, 20 B$
- **North America**: 75 Companies, 16,242 Employees, 9 B$
- **Others**: 40 Companies, 6,695 Employees, 5 B$

(FY 2007)
Hitachi Group REACH Compliance Policy

1. Policy for Information Exchange
   A) Collect information from suppliers which is available at the moment and provide information to customers available to us.
   B) Update the information timely when any important change or additional data obtained.

2. Information Exchange Format
   A) Hitachi's standard format is JAMP AIS / MSDSplus (Upon customer's request or other exceptional situations we may report or receive other formats).

3. Timeline
   A) 2008/11 Start accepting JAMP formats through Hitachi Unified Chemical Management System.
   B) 2009/01 Workability Evaluation Testing using EDI Infrastructure (TWX 21).
   C) 2009/07 Connect to JAMP IT network (Global Portal) and increase flexibility for reporting and collecting.
1. Any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1 % weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

Establish Internal Structure for REACH Compliance

Any legal entity within Hitachi Group selling goods in EU

This team may be integrated within an existing compliance team for other regulations

REACH Compliance Team

- REACH Manager
- Sales Div.
- Procurement Div.
B. Compliance Process for Articles (finished products) Businesses

2. Exchange Information

1. Receive inquiry from customers or consumers
   (Mainly) Sales Div.

2. Receive information from suppliers

3. Compile your information
   (Mainly) REACH Manager

4. Provide information to customers
   (Mainly) Sales Div.

PDCA Cycle

Record keeping

END

Thank you very much for your attention