



Japan Display Inc.

JDI IMDS Datasheet Creation Manual

Japan Display Inc.

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Ver. 1.01

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1 Introduction

1-1 Objectives

1-2 Scope

1-1 Objectives

This manual describes how to create and report Substance Research Data using IMDS*¹.

Refer to IMDS Recommendation, IMDS User's Manual*², and IMDS Training Guide in regard to how to input IMDS data basically.

Refer to this manual for requirements specified by JDI only.

*¹ IMDS(International Material Data System):

The system particularly developed by the Verband der Automobilindustrie (VDA). The system is a database system of global automobile industry standards. The system is also operated by predominant global automobile manufacturers memberships.

*² IMDS User's Manual: User's Manual for the Material Data System (IMDS).

Use this manual for improving the quality of MDS data.

1-2 Scope

This manual is applied to IMDS data sent by suppliers.



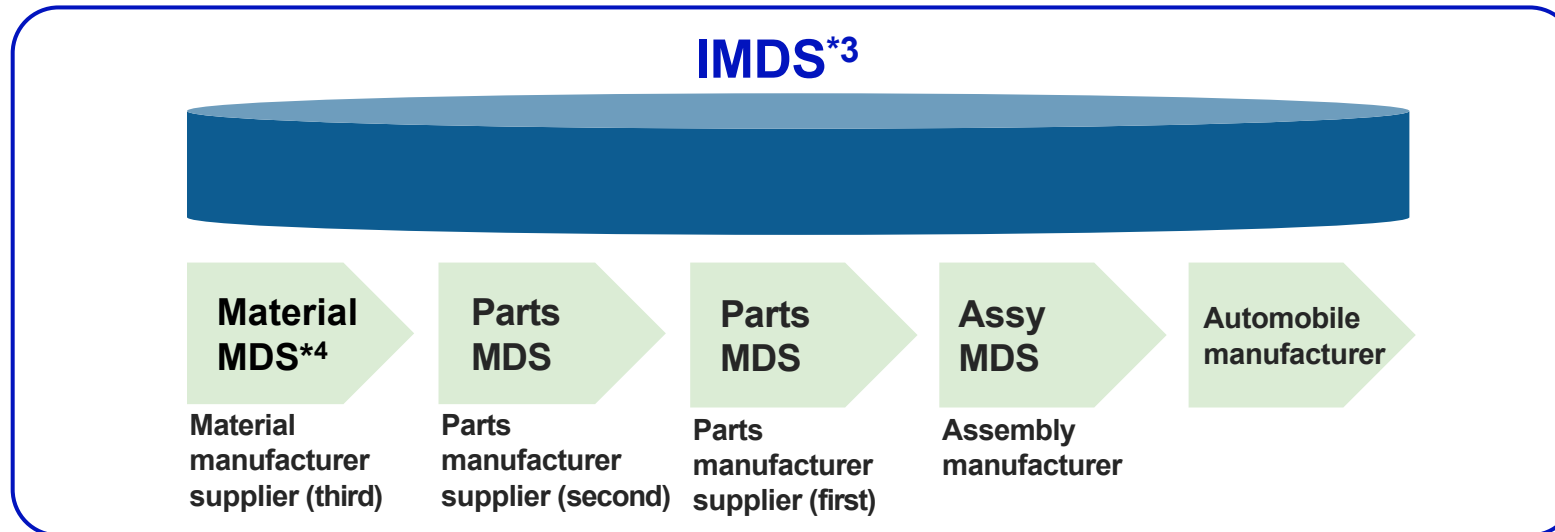
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2 Basic concept on IMDS Reports

- 2-1 How to research and report
- 2-2 On confidential information
- 2-3 Reactive materials in delivered items

2-1 How to research and report

Please be advised that suppliers report us parts and materials after exploring included substances (components) through going back across your supply chains.



*3 **IMDS** (International Material Data System):

This system is the database on the web for which automobile businesses collect MDSs to cope with environmental laws and regulations. The system is also broadly used through supply chains aiming to submit their MDS for the final goal to automobile manufacturers as communication means of MDS.

*4 **MDS** (Material Data Sheet):

Data regarding materials that constitute products and parts, and compounds that constitute the materials.

2-2 On confidential information

For non-disclosure substances (components), the maximum content is up to 10% per homogeneous material. In this regard, avoid including substances regulated by GADSL in the non-disclosure substances.

* For GADSL, refer to "6-1 Always report substances listed on GADSL."

2-3 Reactive materials in delivered items

Report as materials are on delivery to us.

Report a substance that is finally included in (adhered to) the product after reaction such as resins, adhesives, coatings, solder, and plating.



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3 How to input to IMDS (fundamental)

3-1 IMDS Recommendation

3-2 IMDS User's Manual and IMDS Training Guide

3 How to input to IMDS (fundamental)

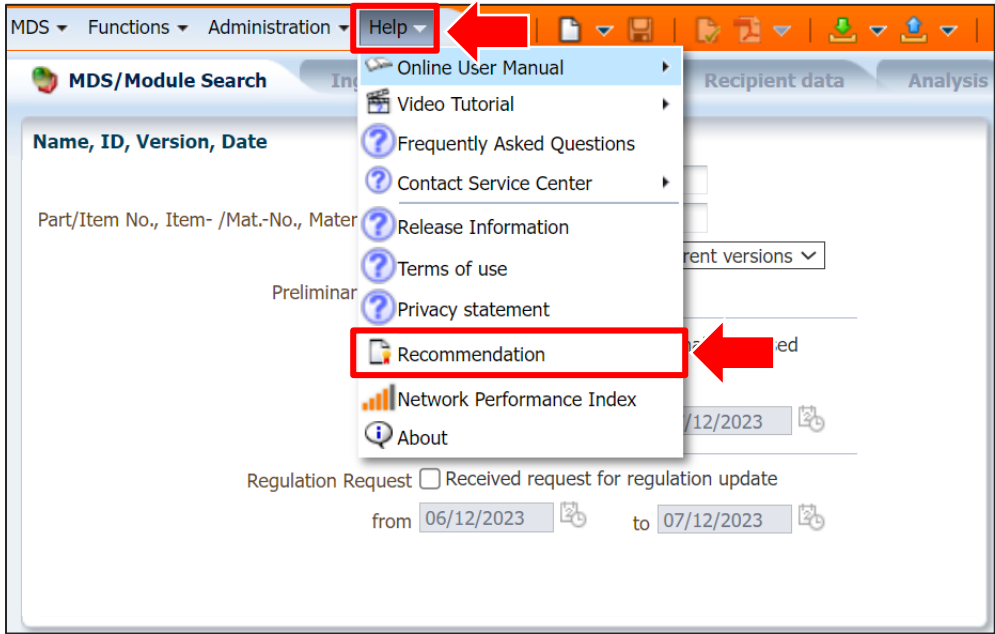
3-1 IMDS Recommendation

The IMDS Recommendations are used for the input rule for the IMDS. The recommendations indicate what the IMDS steering committee recommends.

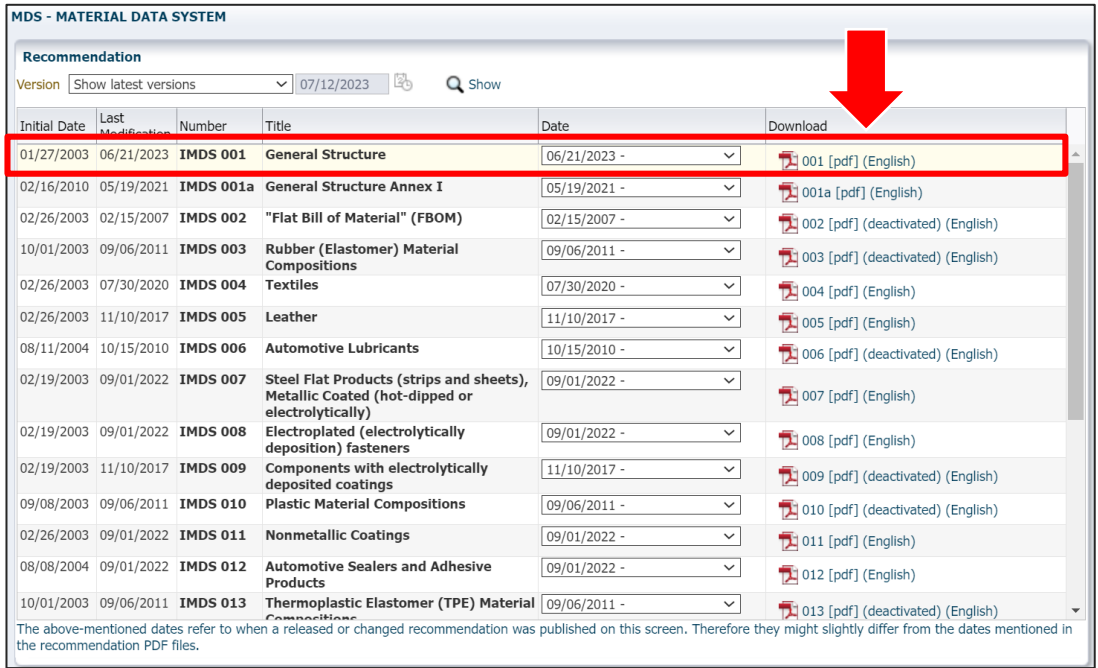
IMDS Login <https://www.mdsystem.com/imdsnt/faces/login>

After login to IMDS, download the file as follows and confirm it.

(1) After the login to IMDS, click [Help]→[Recommendation] on the menu bar.



(2) Click to download. (Example) IMDS 001



3 How to input to IMDS (fundamental)

3-2 IMDS User's Manual and IMDS Training Guide

Download the IMDS User's Manual and IMDS Training Guide from the URL below.

Japanese <https://public.mdsystem.com/ja/web/imds-public-pages/faq>

English <https://public.mdsystem.com/en/web/imds-public-pages/faq>

Chinese <https://public.mdsystem.com/zh/web/imds-public-pages/faq>

Help > FAQ

IMDS login

FAQ - FREQUENTLY ASKED QUESTIONS

Here you can find questions and answers regarding IMDS content and usage in several categories. To

Here you can download the most recent [IMDS User Manual](#).

New to IMDS?

- Reading for New Users
- Company Registration
- Create an MDS

FAQ Categories

- [SCIP \(Substances of Concern in Products\)](#)
- [E/E Components / Recommendation IMDS019](#)
- [Legislative Requirements \(incl. GADSL and REACH\)](#)
- [User Accounts \(IDs\)](#)
- [System Usage](#)
- [IMDS Entry](#)
- [Product Category Specific](#)
- [MDS Ingredients Screen](#)
- [Norms and Standards](#)
- [IMDS Errors and Warnings](#)
- [Communication](#)
- [Materials](#)

SCIP (Substances of Concern in Products)

E/E components / Recommendation IMDS019

Legislative Requirements (incl. GDPR and REACH)

User Accounts (IDs)

System Usage

IMDS Entry

Product Category Specific

MDS Ingredients Screen

Norms and Standards

IMDS Errors and Warnings

Communication

Materials

ELV Directive 2000/53/EC and the latest version of the Annex II (Version: 2019).

Here you can additionally find an [IMDS Steering Committee document](#) on the application changes for your support (Version: June 2016).

FAQ -FREQUENTLY ASKED QUESTIONS is displayed.

IMDS User's Manual (English Version) is displayed. The Error Checking is indicated.



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4 How to input and notes (with specific notes from JDI only included)


- 4-1 List of JDI Specific Requirements
- 4-2 Basic items
- 4-3 IMDS Committee-Approved Materials
- 4-4 Names of materials and goods
- 4-5 "Prior Declarations" for the preparation step of mass production
- 4-6 Application Code
- 4-7 Filler Code
- 4-8 Recyclate Information
- 4-9 Parts Number Subject To Submission
- 4-10 When parts supplied by JDI are included
- 4-11 On submission of MDS Reports
- 4-12 How to transfer data

4 How to input and notes (with specific notes from JDI only included)

4-1 List of JDI Specific Requirements

- For creating an IMDS data sheet, JDI Specific Requirements are in the following. Create an IMDS data sheet that meets the JDI-Specified Requirements.
- After completing data transmission, create MDS Reports to register your reply to jDesc (JDI control system of chemical substances included in supplied products).

Category	Description	Reference slide
Basic items	<ul style="list-style-type: none"> • Enter a part name/part number as specified by us. • When correcting or re-reporting for the product with the same part number, use a new version upgrade with the same MDS ID remained. • Basically, report a new version with a decimal used. • Check [Forwarding allowed]. 	14 to 18
Names of materials and goods	Your entry is optional. For the entry, avoid entering "the product name for the name". Suppliers are advised to take into consideration themselves about confidential information.	23
"Prior Declarations" for the preparation step of mass production	Avoid submitting "Prior Declarations" data sheets for the preparation step of mass production unless we ask that.	24
Parts supplied by us	<ul style="list-style-type: none"> • When parts supplied by us are included, register after removing the parts from the composition. • Report the total weight after the weight of parts supplied by us are excluded. 	31
MDS Reports	<ul style="list-style-type: none"> • After completing data transmission, create an MDS Report to register your reply to jDesc. • For the MDS Reports, submit "the complete report in English based on the JDI perspective". 	32 to 34

On each subsequent slide from the next page,  **JDI Specific Requirements** is attached.

4 How to input and notes (with specific notes from JDI only included)

4-2 Basic items

IMDS Screen	Items	How to input
Configuration Information Screen	(1) Parts name (TOP)	<ul style="list-style-type: none"> • Enter a supplier's part name or any name.
	(2) Part number (TOP)	<ul style="list-style-type: none"> • Enter a supplier's part number or any part number.
	(3) Part name (subparts)	<ul style="list-style-type: none"> • Enter a supplier's part name or any part name.
	(4) Part number (subparts)	<ul style="list-style-type: none"> • Enter a supplier's part number or any part number.
Destination Information Screen	(5) Destination company ID/organization ID	<ul style="list-style-type: none"> • Select "103885".
	(6) Supplier Code	<ul style="list-style-type: none"> • Enter the Supplier Code. (optional)
	(7) Name	<ul style="list-style-type: none"> • Enter JDI Item Name.
	(8) Part/Item No.	<ul style="list-style-type: none"> • Enter JDI Item Number.
	(9) Forwarding allowed	<ul style="list-style-type: none"> • Check [Forwarding allowed].
Common to all screens	(10) ID/Version	<ul style="list-style-type: none"> • When correcting or re-reporting for a product with the same part number, use a new version with the same MDS ID. • Basically, send a version with a decimal used. <p>* If responses described above such as transferring data sheets received from suppliers are prohibited, transferring a new MDS ID/integer version is allowed.</p>



4 How to input and notes (with specific notes from JDI only included)

4-2 Basic items

<Configuration Information Screen>

MDS ▾ Functions ▾ Administration ▾ Help ▾

MDS/Module Search **Ingredients *** Supplier Data Recipient data Analysis MDS Request

Filter GADSL show regulatory information

PRODUCT

- 1x PART_A
 - 5.0g PET
- 1x PART_B
 - 5.0g Ag99.85Ni0.15

Details

Common Information

Type Component (own MDS)

MDS Supplier

Description *

Part/Item No.

Preliminary MDS

Dates

Amou

Measured weight per item g *

Calculated weight per item 10.0 g

Deviation 0.0% ?

(1) Parts name (TOP)
Enter a supplier's part name or any name.

(2) Part number (TOP)
Enter a supplier's part number or any part number.

4 How to input and notes (with specific notes from JDI only included)

4-2 Basic items

<Configuration Information Screen>

MDS ▾ Functions ▾ Administration ▾ Help ▾

MDS/Module Search **Ingredients** Supplier Data Recipient data Analysis MDS Request

Filter: GADSL show regulatory information

▾ PART_A
 ▾ 1x PART_A
 ▾ 5.0g PET
 ▾ 1x PART_B
 ▾ 5.0g Ag99.85Ni0.15

Details

Common Information

Type	Component
ID / Version	11782
Node ID	11782
Node count	4
Description	PART_A
Part/Item No.	A12345678
Preliminary MDS	No
Multi Sourced	No

Dates

Create Date	11/30/2011
Check/Release Date	11/30/2011

Amounts and Weights

Measured weight per item	5.0 g
Calculated weight per item	5.0 g
Deviation	0.0%

SCIP

(3) Part name (subparts)
Enter a supplier's part name or any part name.

(4) Part number (subparts)
Enter a supplier's part number or any part number.

4 How to input and notes (with specific notes from JDI only included)

4-2 Basic items

<Recipient data screen>

The screenshot shows the 'Recipient data' screen in the MDS system. The browser address bar indicates the URL is 'MDS/Module Search'. The page title is 'Recipient data *'. The breadcrumb navigation shows 'MDS/Module Search > Ingredients * > Supplier Data * > Recipient data * > Analysis > MDS Request'. The main content area displays the following information:

- Name: Component_1222065358 | ID version: 1222065358 / 0.01 | Node ID: 1222065358 | Status: Edit mode
- Buttons: Send, Propose, Release Internal, Publish
- Supplier: Japan Display Inc. [103885] edit mode (05/19/2023)

The 'Details' section is expanded, showing the following fields:

- Transfer Information:**
 - Company: Japan Display Inc. [103885]
 - Organisation unit: -
 - Recip. Status: edit mode
 - Supplier Code: XXXXXX
 - Name: PRODUCT
 - Part/Item No.: A12345678
 - Legacy Spare Part:
 - Transmission/Check Date: not available
 - Forwarding allowed:
- Drawing:**
 - Drawing No.:
 - Drawing dated:
 - Drawing Change Level:
- Purchase Order:**
 - Purchase Order No.:
 - Bill of Delivery No.:
- Report:**
 - Report No.:
 - Date of Report: mm/dd/yyyy

Annotations on the left side of the screen, grouped under 'JDI Specific Requirements', point to the following fields:

- (5) Destination company ID/organization ID Select "103885".
- (6) Supplier Code (optional) Enter the Supplier Code.
- (7) Name Enter JDI Item Name.
- (8) Part/Item No. Enter JDI Item Number.
- (9) Forwarding allowed Check [Forwarding allowed].

JDI Specific Requirements

4 How to input and notes (with specific notes from JDI only included)

4-2 Basic items

<Common to all screens>

The screenshot displays two overlapping windows from the MDS software. The top window, 'MDS/Module Search', shows a table with the following data:

Name	ID version	Status
PRODUCT	1173219901 / 1	accepted (11/28/2022)

The bottom window, 'Component Search', shows a search form with the following fields:

- Description: []
- Part/Item No.: []
- ID: []
- Preliminary MDS: []
- Date: [] published / accepted / internally released

A context menu is open over the 'Component Search' table, showing the following options:

- Edit
- View
- Copy
- Forward
- Delete
- Check
- Copy to clipboard
- Convert module to MDS
- Submit MDS to SCIP

The 'Copy' option is highlighted, and a sub-menu is open showing the following options:

- new Datasheet
- new version

(10) ID/Version

- When correcting or re-reporting for the product with the same part number, use a new version with the same MDS ID basically.
- Basically, report a new version with a decimal used.

JDI Specific Requirements

<How to upgrade the ID version>

Select the target data displayed by searching the components and select [Menu] ⇒ [Copy] ⇒ [new version] in sequence. The data sheet upgraded is created to enable editing.

4 How to input and notes (with specific notes from JDI only included)

4-3 IMDS Committee-Approved Materials

- In the IMDS rule, when IMDS committee-approved materials are provided in official standards, the materials shall be used.
- When the material is provided, use material data sheets disclosed by the IMDS steering committee instead of creating a data sheet on your own. (IMDS Recommendation 4.4.1.1)

* What is the IMDS Committee-Approved Material?

- The material above is the standard material (that means the data sheet disclosed by the IMDS steering committee).
- In the IMDS, official standard materials specified by international standard organizations such as EU (including EN•DIN standards), Japan (JIS standard), U.S. (ASTM standard• UNS standard), ISO standard are registered as IMDS committee materials.

4 How to input and notes (with specific notes from JDI only included)

4-3 IMDS Committee-Approved Materials

<How to input IMDS Committee-Approved Materials>

(1) Confirming material information

- Confirm JIS standard numbers and material codes based on information such as specifications, drawings, JIS standard numbers or others.

<Example>An example of stainless-steel bar is given.

JIS standard number: JISG4303 Material Code: SUS316N

JIS standard numbers and Material Codes can be confirmed on the website of the JIS standard or other sources.

JIS standard website: <http://www.jisc.go.jp/>

An excerpt from the JAPIA external list in the following, "MAT" sheet can also be referred.

Material name	-	Norms/Standards (Public standard)	Material number (Metal or other than plastics or rubber materials)	Material symbol (plastics or rubber)	VDA Classification	IMDS Name
Stainless Steel SUS316N	-	JISG4303	SUS316N		1.1.2	SUS316N

AT **MAT** UNIT2 IMDS_PCTYPE IMDS_NORM IMDS_CATEGORY (+)

To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-3 IMDS Committee-Approved Materials

(2) Confirming the IMDS registrations

- Enter the JIS standard number: JISG4303 and the Material Code: SUS316N on the Material Search Screen of IMDS.
- The IMDS controls materials by setting the module ID and its version.
New version data may be registered in case of updating official standards and correcting a clerical error or other events.

(1) Click the material search icon

(2) Input "SUS316N" for the Std. Mat.-No.

(3) Input Norm (material standard) "JISG4303".

(4) Check "published MDSs" and "Preferred MDSs."

(5) Click [Search] button.

(6) The appropriate IMDS Committee-Approved Material is displayed. (Click to display detail information. Refer to the next page.)

- The IMDS Committee-Approved Material with a different version is registered for identical SUS316N.
- **Report the one using the latest version.**
(For this case, 11896411 / 7 is the latest version)

Type	Name	Symbol	Trade name	Std. Mat.-No.	Internal Mat.-No.	ID / Version	Supplier	Received reg. requests	Date of first
	SUS316N (Stainless steel)	-	-	SUS316N	-	11896411 / 7	IMDS-Committee / ILI Metals	-	-

To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-3 IMDS Committee-Approved Materials

(3) Confirming the IMDS registrations

The registered detail of the material "SUS316N" is displayed.

The compound constituent is displayed.

The material code, "SUS316N", is displayed for the Standard Material Code.

The JIS standard number, "JISG4303", is displayed on the official material standard number field.
*While three JIS standards are provided, one IMDS Committee-Approved Material is only registered.

Material Search | Filter: GADSL | show regulatory information

SUS316N (Stainless steel)

- 0.0 - 0.08% Carbon
- 16.0 - 18.0% Chromium
- Rest 66.7625% Iron
- 0.0 - 2.0% Manganese
- 2.0 - 3.0% Molybdenum
- 0.1 - 0.22% Nitrogen
- 10.0 - 14.0% Nickel
- 0.0 - 0.045% Phosphorus
- 0.0 - 0.03% Sulphur
- 0.0 - 1.0% Silicon

Details

ID / Version: 21030111 / 1
Node ID: 892181587
Node count: 11
MDS Supplier: IMDS-Committee / ILI Metals
Name: SUS316N (Stainless steel)

Check/Release Date: 1/5/2020 | Recommendation

Material Information

Std. Mat.-No. SUS316N

Symbol: -
Classification: 1.1.2 highly alloyed
SCIP Material Category: -
Additional Material Characteristics: -
Norms / Standards

Company	Norm	Norm Code
-	JIS	G4303 (2012)
-	JIS	G4304 (2012)
-	JIS	G4305 (2012)

Supplier: -

4 How to input and notes (with specific notes from JDI only included)

4-4 Names of materials and goods

- Input is optional. For the entry, avoid entering "the product name for the name."
- We are not allowed to correct data received from suppliers. Suppliers are advised to take into consideration themselves about confidential information of products/materials or its related information.

The screenshot shows the MDS software interface. The left sidebar displays a tree view with 'PET' selected, showing a composition of 99.9% Polyethylene terephthalate and 0.1% Misc., not to declare. The main area shows the 'Details' section for 'Common Information'. The 'Name' field contains 'PET' and is marked with a red asterisk. A callout box with a blue border and white background contains the text: 'Avoid entering "the product name for the name". The field may be blank if the name is confidential.' A red box labeled 'JDI Specific Requirements' with a person icon points to this callout. Other fields include 'Node count' (6), 'Trade name' (empty), 'Internal Mat.-No.' (A12345678), and 'Preliminary MDS' (checkbox).

*Contact us separately if a material name cannot be corrected because a material manufacturer has prepared the material or other reasons.

4 How to input and notes (with specific notes from JDI only included)

4-5 "Prior Declarations" for the preparation step of mass production

- Submit data of mass-produced parts to us.
- Avoid submitting "Prior declarations" data sheet for preparation of mass production step unless we ask that.

[Notes]

- Data received from overseas second suppliers may include data with data checked in the diagram below included. If those data are included, our customers may refuse to receive them. In that case, note that re-submission and re-investigation will be required, even if those data are identical.

The screenshot shows the MDS software interface with the following details:

- Menu: MDS -> Functions -> Administration -> Help
- Navigation: Material Search, Ingredients, Supplier Data, Recipient data, Analysis, MDS Request
- Filter: GADSL
- Material: PET
 - 99.9% Polyethylene terephthalate
 - Rest 0.1% Misc., not to declare
- Details Section:
 - Common Information:
 - Type: Material (Module)
 - Name: PET *
 - Trade name: [Blank]
 - Internal Mat.-No: A12345678
 - Preliminary MDS:
 - Dates: [Blank]

JDI Specific Requirements

4 How to input and notes (with specific notes from JDI only included)

4-6 Application Code

<Entry rule>

- Enter the code that meets the application of the product in the Application Code.
 - * When entering 0.1% or more of lead as impurity, report it using "Application Code 44". Avoid entering "0" for the minimum because the Application Codes other than 44 to 47 would be intentionally used. For those cases, we may request corrections if our customer asks us to do it.
- If changes in exemption of product item (fragmentation of Application Codes) and disabling of Application Codes (13, 16, 58, etc.) are provided, we may request updating of data already reported.
- When creating a data sheet, use the latest Application Codes, reviewing "How to find the latest Application Codes" on the next page.

To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-6 Application Code

<How to confirm the latest Application ID>

(1) Open the FAQ - FREQUENTLY ASKED QUESTIONS in the IMDS.
<https://public.mdssystem.com/en/web/imds-public-pages/faq>

(2) Click "MDS Ingredients Screen."

(3) Click "Is there any further explanation as to how to select an Application ID?"

(4) Click "downloadable Excel file" and see "Substance Applications."

Substance Applications
(possible default selection in *italics*)

Lead used as/in

1(a) - Steel for machining purposes and batch hot dip galvanized steel components containing up to 0.35 % lead by weight
1(b) - Continuously galvanized steel sheet
2(a),(b),(c)(i) - Alloying element in aluminum for machining purposes
2(c)(ii) - Recycled aluminum alloy containing unintentionally added lead
3 - Alloying element in copper
4(b) - Alloying element in bearing shells and bushes in engines, transmissions and air conditioning compressors
4(a) - Alloying element in bearing shells and bushes for all other applications (potentially prohibited)

Lead and its compounds used as/in

5(a) - Lead in batteries in high voltage systems (2a) that are used only for propulsion in M1 and N1 vehicles
5(b) - Lead in batteries for battery applications not included in entry 5(a)
5(b)(i) - Lead in batteries
(1) used in 12 V applications
(2) used in 24 V applications in special purpose vehicles as

4 How to input and notes (with specific notes from JDI only included)

4-7 Filler Code

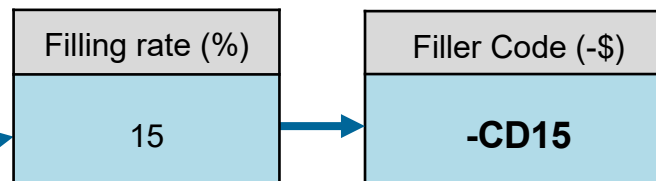
Create a Filler Code based on the Compound Information of fillers and enter it in the Material Data field.

- When two kinds of fillers are provided, enter them in descending order of the component ratio following "+" like - (GF20+TD10).
- Express a filling rate numerically by an integer rounded off one decimal place. (Example : 10.3→10、 11.8→12)

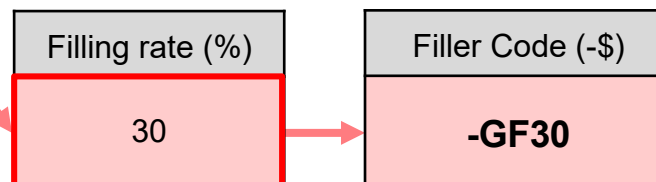
Information of ISO1043-2

Substance and Material Information		Form	
B	boron	B	beads, balls
C	carbon	C	chips, cuttings
E	clay	D	powder
G	glass	F	fiber
K	calcium carbonate	G	ground
L	cellulose	H	whisker
M	mineral, metal	K	knitted fabric
P	mica	L	layer
		M	mat
		N	non-woven

<Example 1>
 If, for coloring a resin (black), carbon powder is mixed in 15%, enter carbon (carbon: C) · powder (powder: D) · 15% ⇒ -CD15.



<Example 2>
 If, for preventing thermal expansion of resins, glass fiber is mixed at 30%, enter glass (glass: G) · fiber (fiber: F) · 30% ⇒ -GF30.



4 How to input and notes (with specific notes from JDI only included)

4-8 Recyclate Information

- Select whether recycled materials are used or not. *Be sure to input recycling information that causes an error in the IMDS error check.

When the recyclate is used, please input all the required items.

NG

Source of material, including circular materials
 Content of inorganic or fossil-based material
 100.0 - 100.0 % ⓘ
 Does the material contain recyclate?

OK

Source of material, including circular materials
 Content of inorganic or fossil-based material
 100.0 - 100.0 % ⓘ
 Does the material contain recyclate?

Select whether recycled materials are used or not.

OK

Source of material, including circular materials
 Content of inorganic or fossil-based material
 100.0 - 100.0 % ⓘ
 Does the material contain recyclate?

Content of primary inorganic or fossil-based material
 * - * %
 Content of recyclate
 * - * %

When the recyclate is used, please input all the required items.

To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-8 Recyclate Information

<How to check response to Recyclate Information>

- Responses for Recyclate Information can be checked by the search function of IMDS.

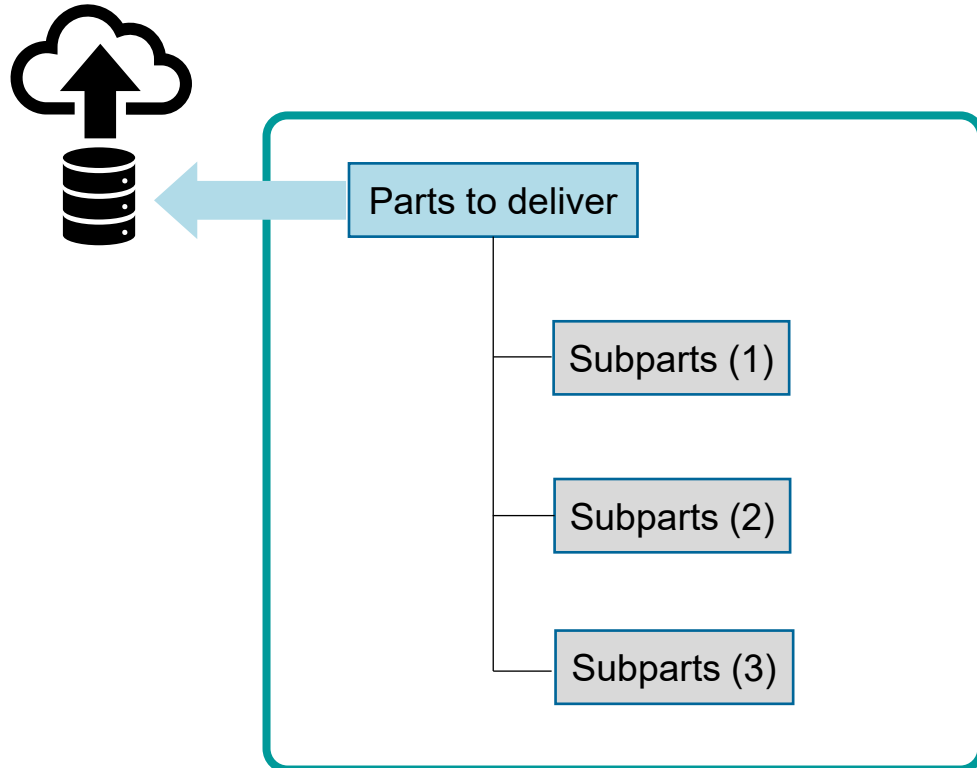
- (1) Click the [Search] mark.
- (2) Type : Select [Source of material, including circular materials].
- (3) Recyclate content : Select [not yet answered].
- (4) Click [Search].
- (5) Specify an [not yet answered] location.
- (6) [Find next] to check all over the data.

4 How to input and notes (with specific notes from JDI only included)

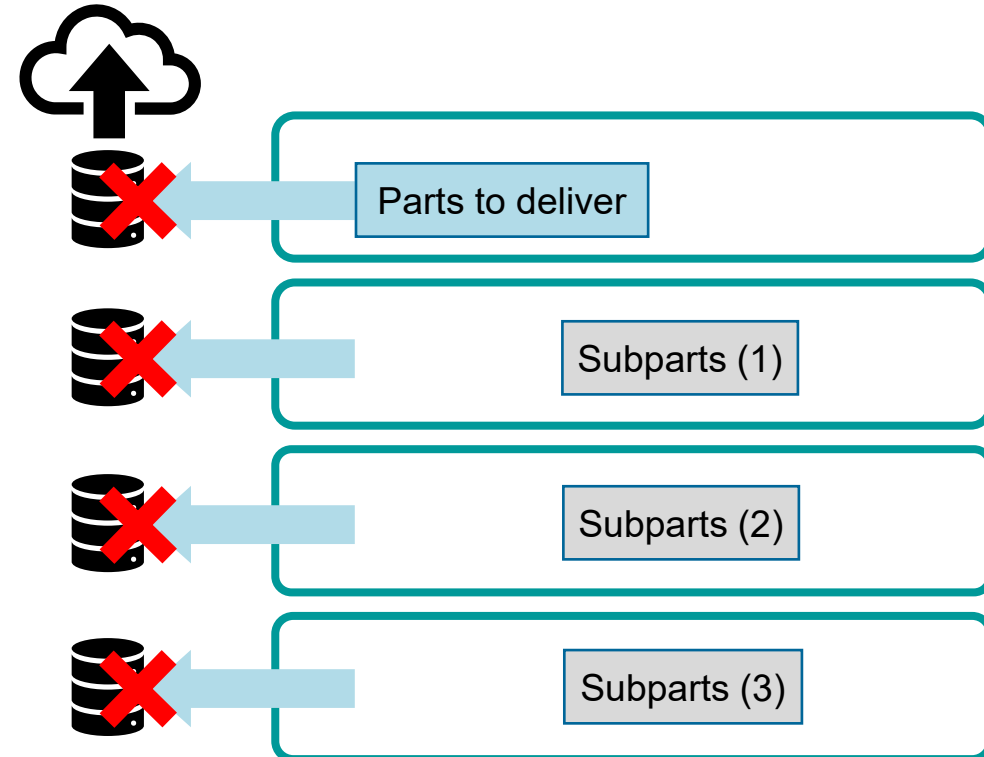
4-9 Parts Number Subject To Submission

Submit IMDS data of a delivery unit with a part number for us.
Avoid submitting with a subpart unit.

Submit IMDS data of a delivery unit with a part number for us.



Avoid submitting with a subpart unit.



4 How to input and notes (with specific notes from JDI only included)

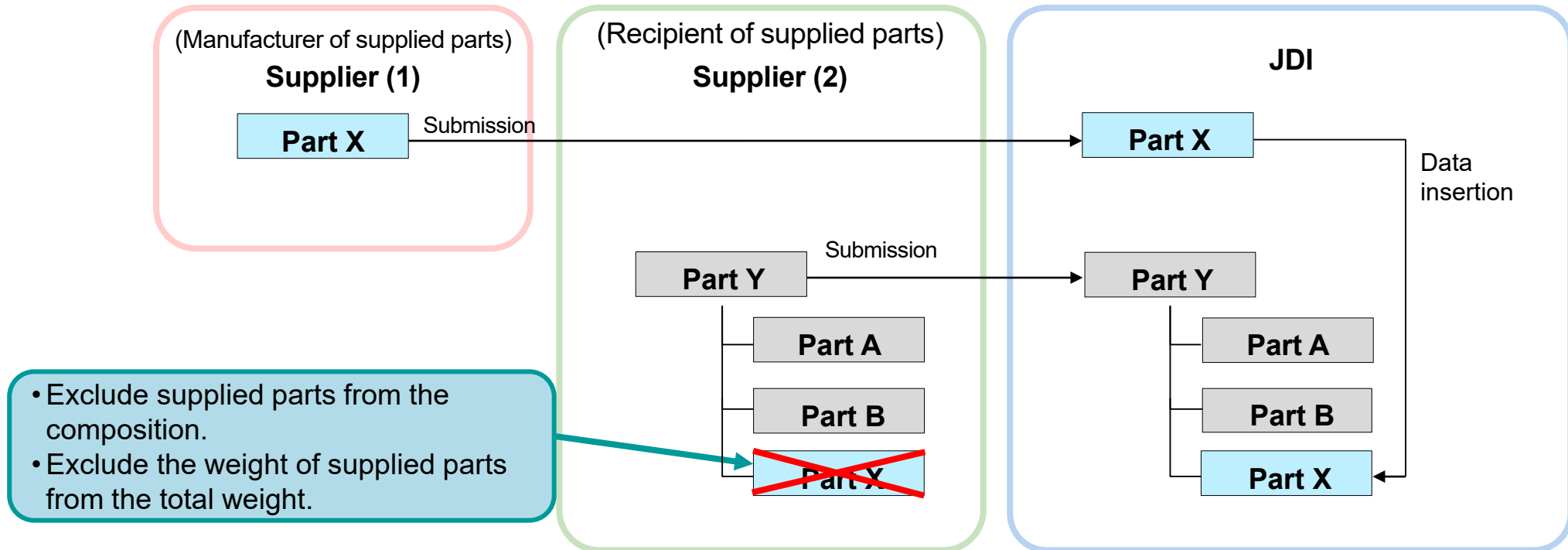
4-10 When parts supplied by JDI are included



- When parts supplied by us are included, register after removing the parts from the composition.
- Report the total weight after the weight of parts supplied by us are excluded.

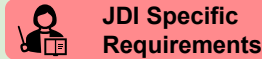
<Corresponding example>

Part X : Parts supplied by JDI



4 How to input and notes (with specific notes from JDI only included)

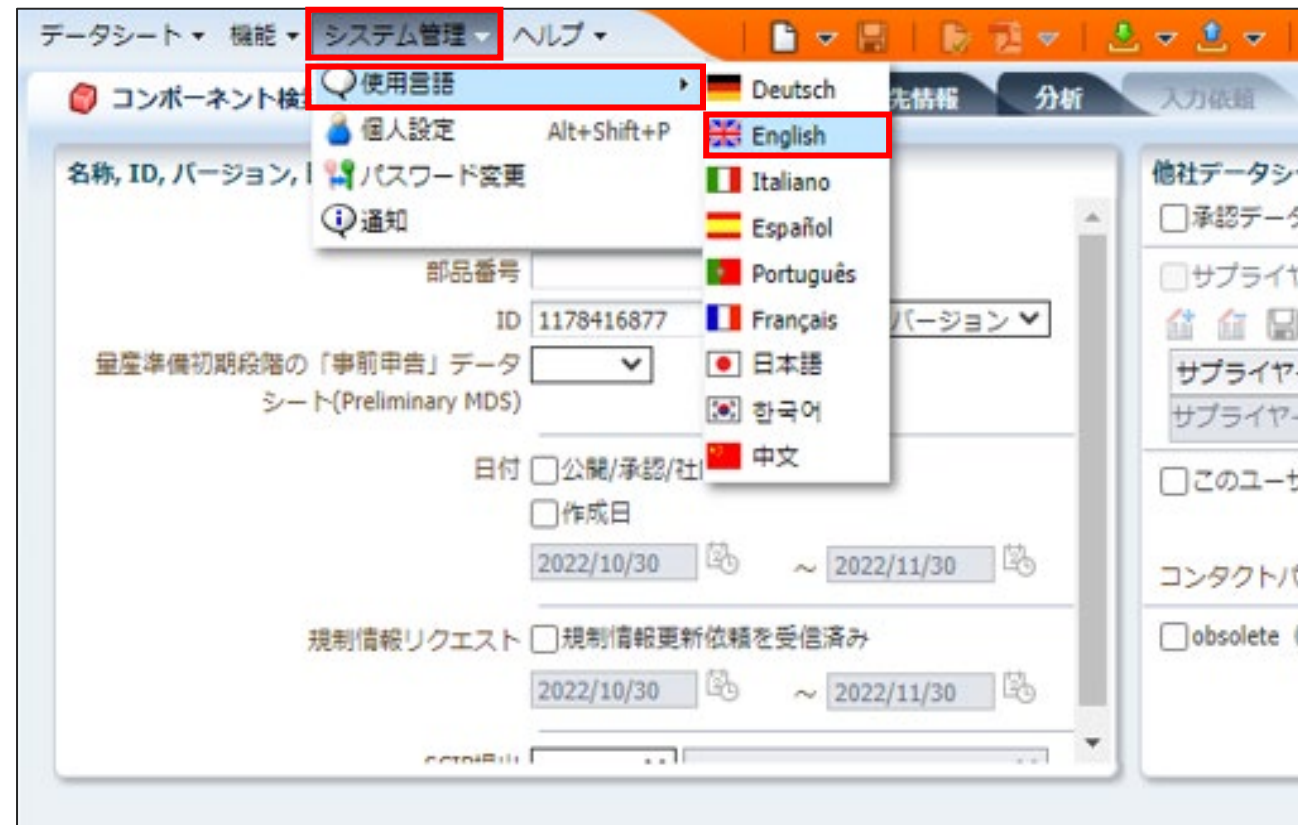
4-11 On submission of MDS Reports



After completing data transmission, create an MDS Report in English to register it to jDesc (JDI Control System of Chemical Substances included in Supplied Products). In terms of how to register in jDesc, check the "jDesc Operation Manual for Supplier".

<How to create the MDS Reports in English>

(1) Select [System control] ⇒ [Language] ⇒ [English].



To be continued on the next page

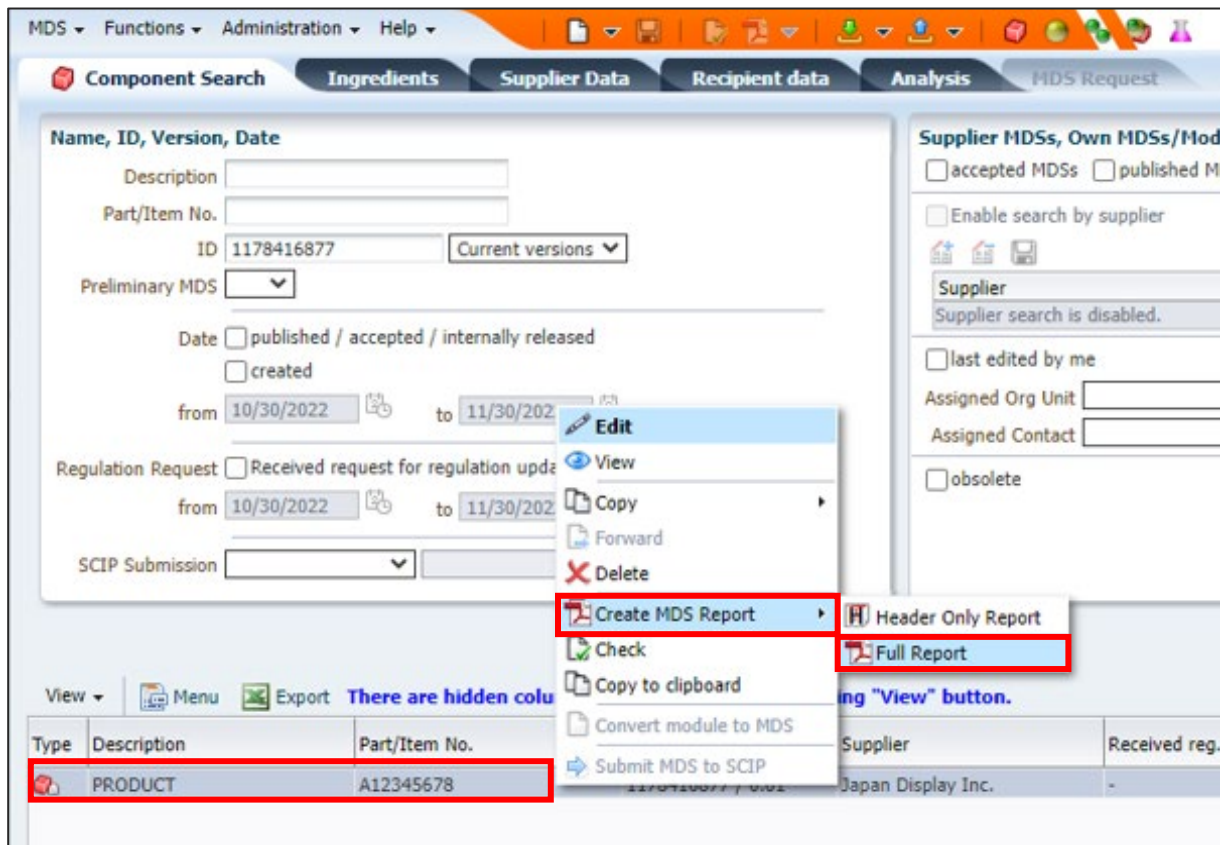
4 How to input and notes (with specific notes from JDI only included)

4-11 On submission of MDS Reports

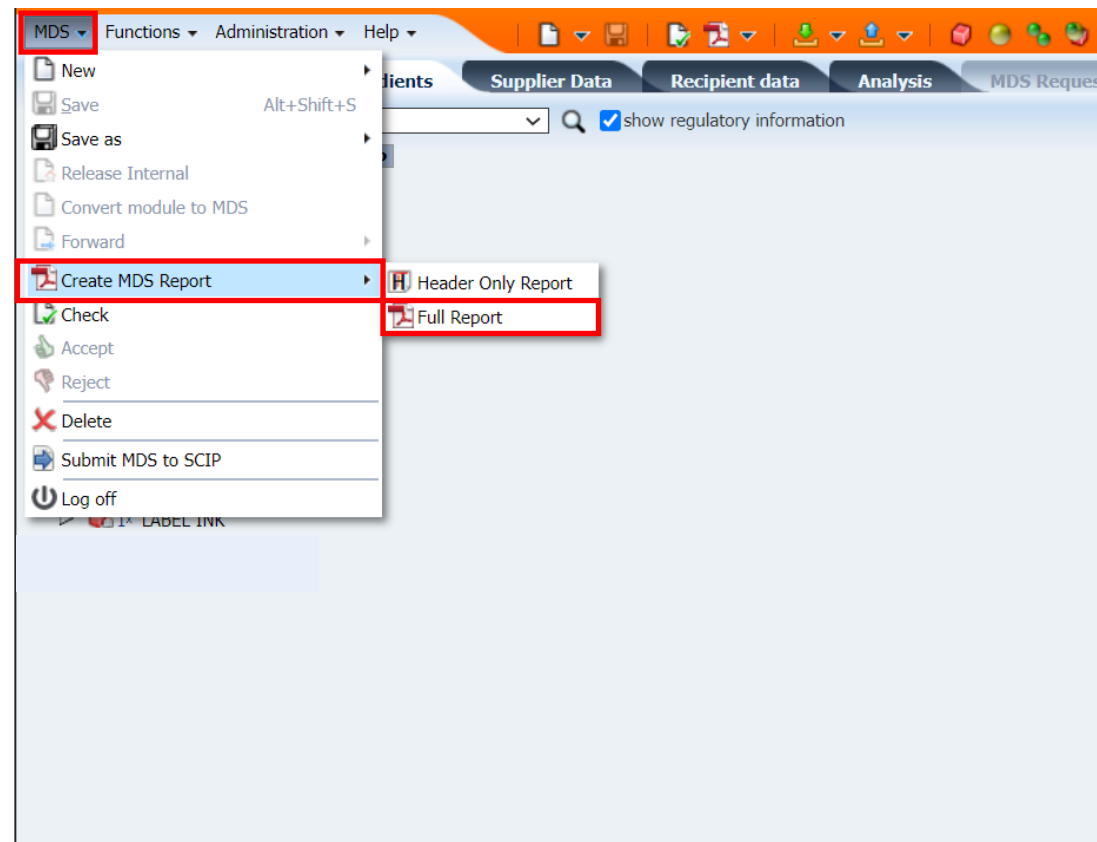
JDI Specific Requirements

(2) Select [Create MDS Report] ⇒ [Full Report] Both a) and b) as follows are available.

a) Select [Component Search] to right-click to select.



b) Select from [MDS] with the data sheet open.



To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-11 On submission of MDS Reports



(3) Select [Japan Display Inc.] to create a report on JDI perspective.

MDS - MATERIAL DATA SYSTEM

Please select a company view for the generated MDS Report

Point of view サプライヤー様名 ▼

サプライヤー様名

Japan Display Inc.


✓ OK ↻ Cancel



MDS - MATERIAL DATA SYSTEM

Please select a company view for the generated MDS Report

Point of view Japan Display Inc. ▼

 In the recipient's point of view, section 2 ("Characterization of the component") still shows the creator's (your) view of the decomposition. Therefore you might see confidential substances that the recipient cannot see.

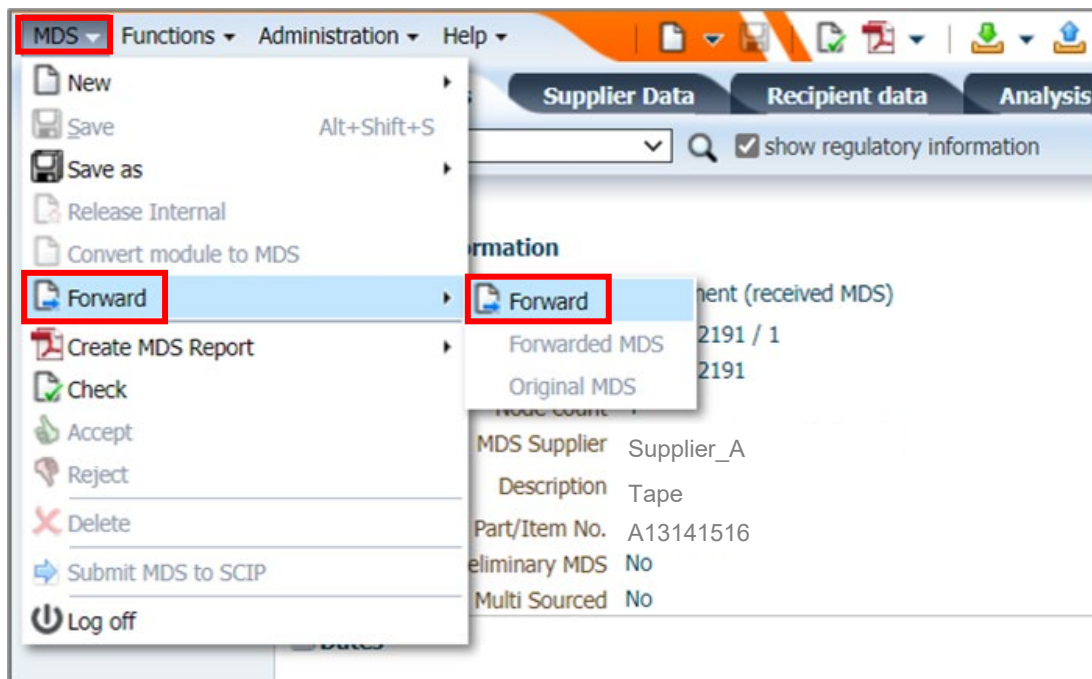
✓ OK ↻ Cancel

4 How to input and notes (with specific notes from JDI only included)

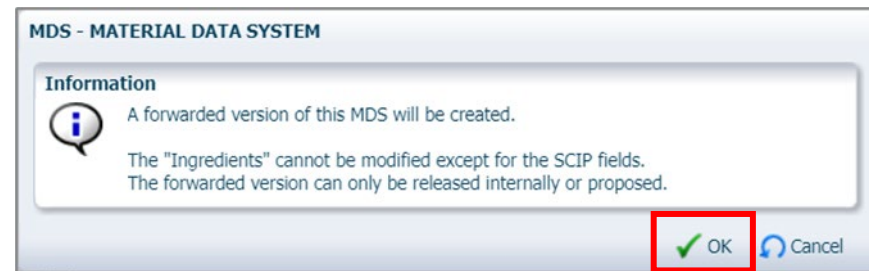
4-12 How to transfer data

When the data sheet received from the supplier is submitted to us as is, transfer it as follows.

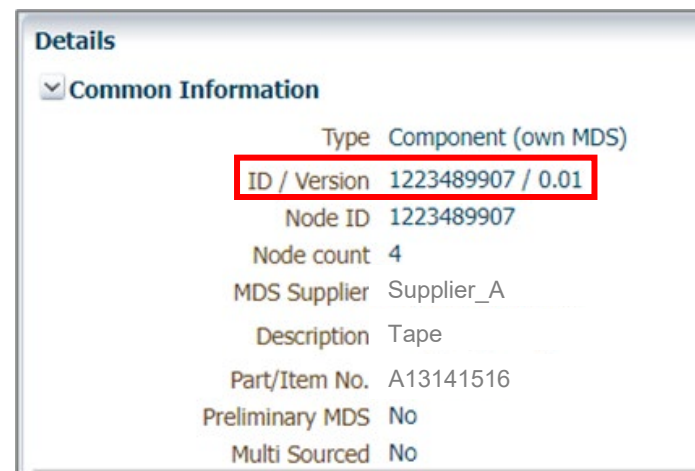
(1) Select [MDS] ⇒ [Forward].



(2) Select [OK].



The data sheet is created with a new ID.



To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-12 How to transfer data

(3) Input into the [Supplier Information] sheet.

MDS > Functions > Administration > Help >

MDS/Module Search | Ingredients | **Supplier Data** | Recipient data | Analysis | MDS Request

Name IMDS test | ID version 1181534303 /0.01 | Node ID 1181534303 | Status Edit mode

Company

Company
Company ID
DUNS Number
Company Address

Supplier Information

Organisation unit

Company ID
DUNS Number
Company Address

Supplier Information

Contact Person

Contact Person

E-Mail
Telephone No.
Fax No.



(4) Input into the [Destination Information] sheet.

MDS > Functions > Administration > Help >

MDS/Module Search | Ingredients | **Supplier Data** | **Recipient data**

Name IMDS test | ID version 1181534303 / 0.01 | Node ID 1181534303 | Status Edit mode

+ | - | Send | Propose | Release Internal | Publish

There are no recipients assigned to this MDS yet.

Destination Information

To be continued on the next page

4-12 How to transfer data

(5) After entering company ID "103885", click [Search]. Select the company name displayed to click [Apply].

MDS - MATERIAL DATA SYSTEM

Company

Company Name

Company ID

Org Unit

DUNS Number

Zip Code

City

Country

Only root companies

View

Company Name	Org Unit	ID	Zip Code	City	Country
Japan Display Inc.	Japan Display Inc.	103885	105-0003	Minato-ku, Tokyo	Japan

Total records found 1

To be continued on the next page

4 How to input and notes (with specific notes from JDI only included)

4-12 How to transfer data

(6) Input the following items to select [Send All].

* [Transmission] is unavailable for transferring.

The screenshot shows the MDS software interface. The 'Propose' button is highlighted with a red box. The 'Details' panel on the right contains the following information:

Transfer Information	
Company	Japan Display Inc.[103885]
Organisation unit	-
Recip. Status	edit mode
Supplier Code	Supplier Code
Name	JDI Item Number Name
Part/Item No.	JDI Item Number
Legacy Spare Part	No
Transmission/Check Date	1/18/2023
Forwarding allowed	Yes
Drawing	
Drawing No.	-
Drawing dated	-
Drawing Change Level	-
Purchase Order	
Purchase Order No.	-
Bill of Delivery No.	-
Report	
Report No.	-
Date of Report	Data Sheet Transmission Day



Japan Display Inc.

5 Warning in IMDS

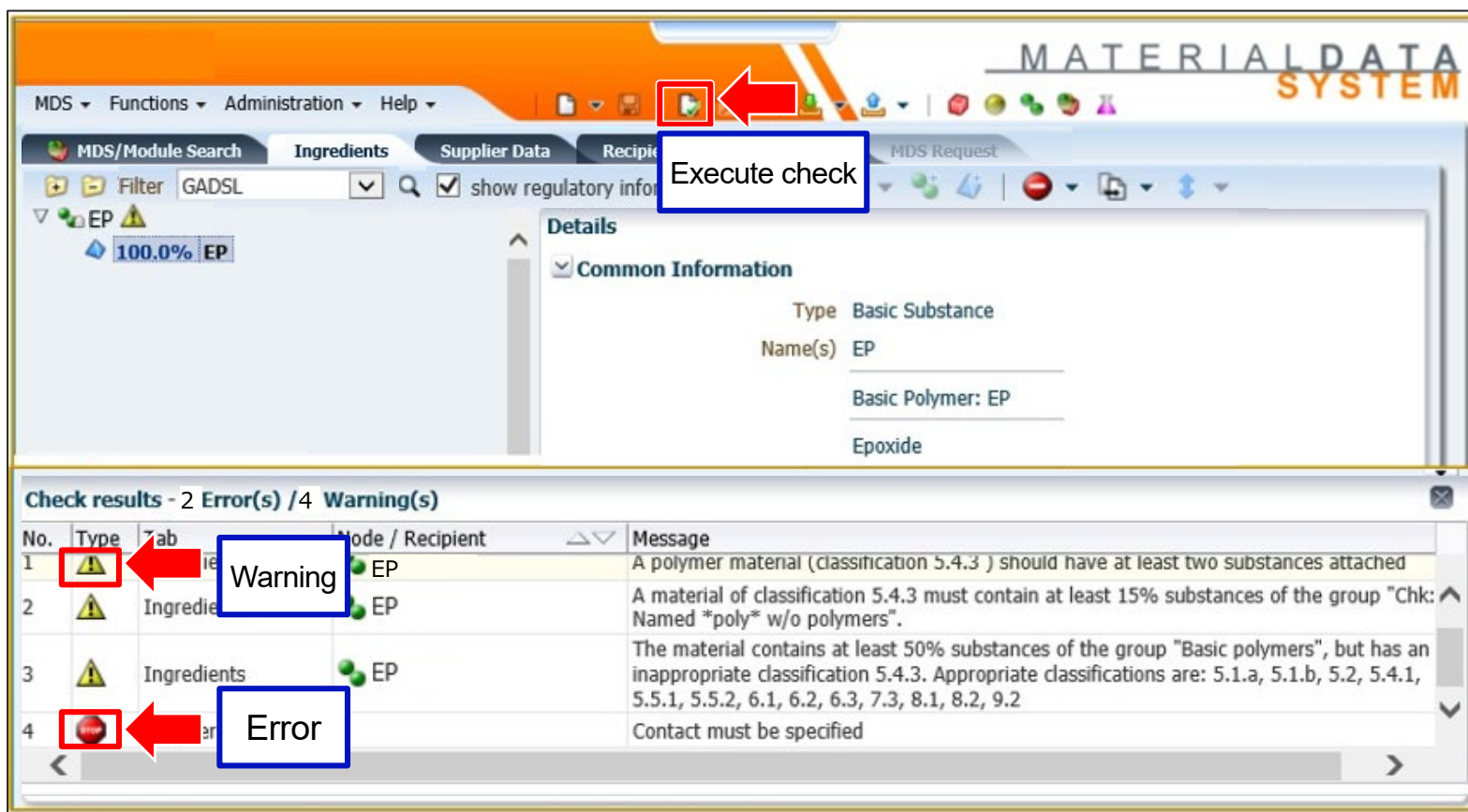
5-1 Confirming errors and warnings

5-2 Corrective actions

5-1 Confirming errors and warnings

When the Error/Warning is displayed after the Error Checking of IMDS is carried out, confirm the error detail and report it after correction.

[How to check Error/Warning in IMDS]



5 Warning in IMDS

[How to check warning details]

Confirm warning details on the following URLs.

Japanese <https://public.mdsystem.com/ja/web/imds-public-pages/faq>

English <https://public.mdsystem.com/en/web/imds-public-pages/faq>

Chinese <https://public.mdsystem.com/zh/web/imds-public-pages/faq>

The image shows a sequence of two screenshots from the IMDS website's FAQ page. The first screenshot shows the 'FAQ - FREQUENTLY ASKED QUESTIONS' section highlighted with a red box and a blue callout box stating: **"FAQ - FREQUENTLY ASKED QUESTIONS" is displayed.** A red arrow points to this section. Below it, a list of categories is shown, with 'IMDS Errors and Warnings' highlighted by a red box and a blue callout box stating: **Click "IMDS Errors and Warnings."** A red arrow points to this link. A green arrow indicates the transition to the second screenshot. The second screenshot shows the 'IMDS Errors and Warnings' page, with a red box around the main heading and a blue callout box stating: **"IMDS Errors and Warnings" is displayed.** Another red box highlights a specific question: **"What do the warnings and errors in IMDS mean and how can I fix them?"** with a blue callout box stating: **"What do the warnings and errors in IMDS mean and how can I fix them?" is displayed.** A red arrow points to this question.

5-2 Corrective actions

We are not allowed to correct received data in MDS.

- All errors shall be corrected.
- Please confirm and correct what the warning indicates according to the details in the following pages. We do not necessarily ask you to correct all warnings but may ask you correction according to a customer's request or other cases.
(Even if we have once approved the warning, please do it likewise the above.)

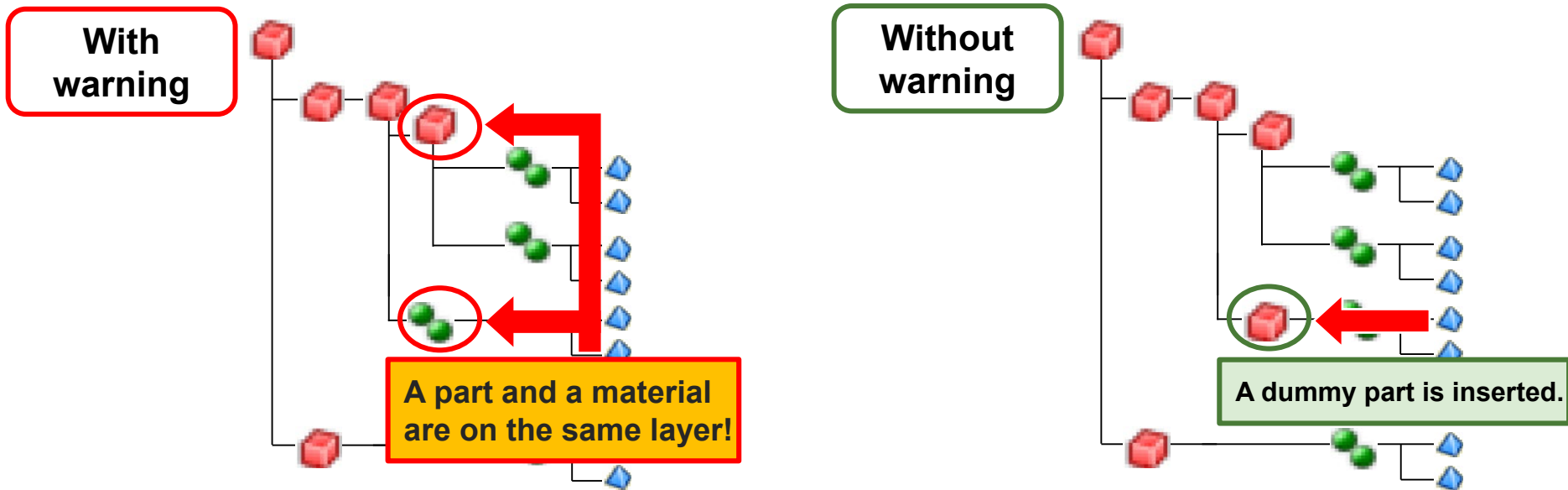
(1) When a part and a material are on the same layer under a part

[Checking in IMDS: On placing different types of items on the same level] Refer to (IMDS User's Manual 3.3.17 Check Procedure)

- When a part and a material are placed under the identical main parts in the IMDS, a warning is displayed.

[How to deal with warnings]

- Insertion of a dummy part such as the right bottom diagram avoids a warning.
- * Names for "dummy parts" are optional but using a material name is recommended.



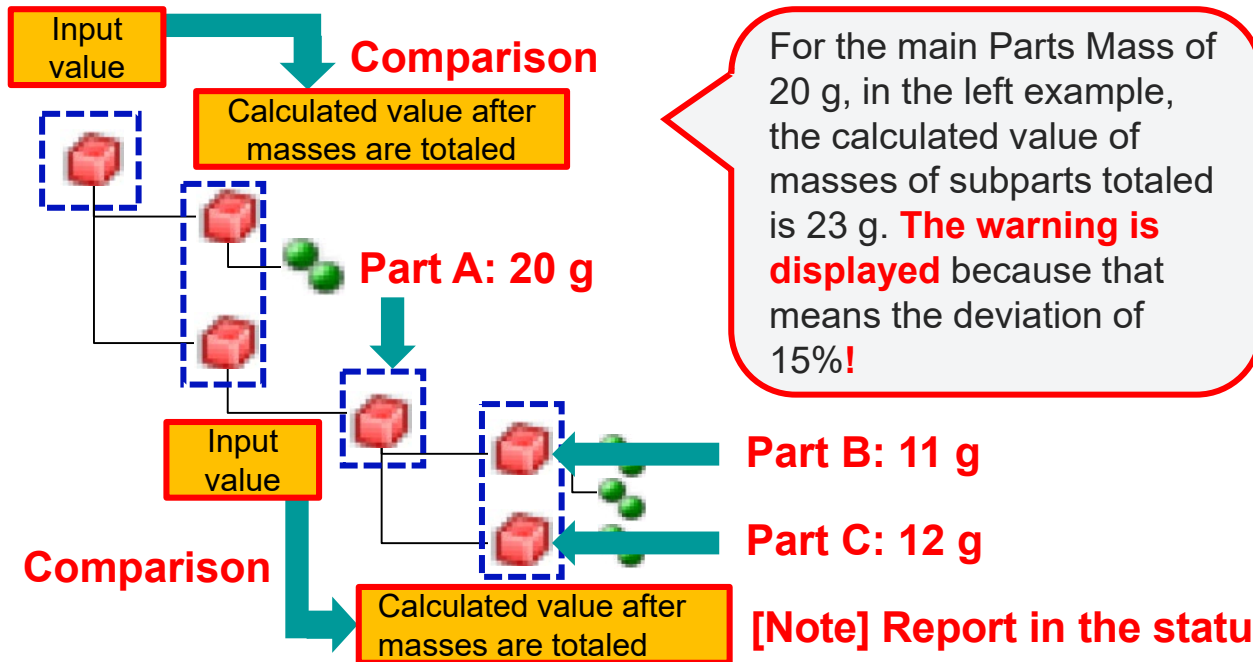
[Note] Report in the status without this warning!

(2) When the maximum deviation of part mass exceeds the reference value of IMDS

[Checking in IMDS: The maximum deviation based on the Parts Mass]

Refer to (IMDS User's Manual 3.3.17 Check Procedure)

- IMDS checks the maximum deviation of subparts based on the mass value of main parts.
- * The Error Checking is carried out for all layers of the parts structure.
- **Any values shall fall within the reference value range to avoid warnings.**
(Because the mass value cannot fall within the tolerance when we report products data to customers.)



[Reference value on Error Checking]

Main Parts Mass [M]	Maximum deviation [%]
$M < 1 \text{ g}$	100
$1 \text{ g} \leq M < 100 \text{ g}$	10
$100 \text{ g} \leq M < 1 \text{ kg}$	5
$1 \text{ kg} \leq M < 10 \text{ kg}$	2
$10 \text{ kg} \leq M < 100 \text{ kg}$	1
$100 \text{ kg} \leq M$	1

[Note] Report in the status without this warning!

(3) When the content rate range of compound exceeds the reference value of IMDS

[Rule in IMDS: The maximum deviation based on the Parts Mass]

Refer to (IMDS Recommendation 001 4.5.4 Portion (Percentage) Ranges, IMDS User's Manual 3.3.17 Check Procedure)

- The tolerance (minimum value – maximum value) in the content rate of compound is provided in the following. Report the content rate so that it falls within the tolerance range.
- * If a material is defined based on official standards, it is accepted that the content rate may exceed the tolerance range.

[Range value of the content rate]

Content rate of compound Maximum = Y% Minimum = X%	Tolerance range M = Y% - X%
$0 \leq X \leq 7.5$	$M \leq 3$
$7.5 < X \leq 20$	$M \leq 5$
$20 < X \leq 100$	$M \leq 10$

[Note] Report in the status without this warning!

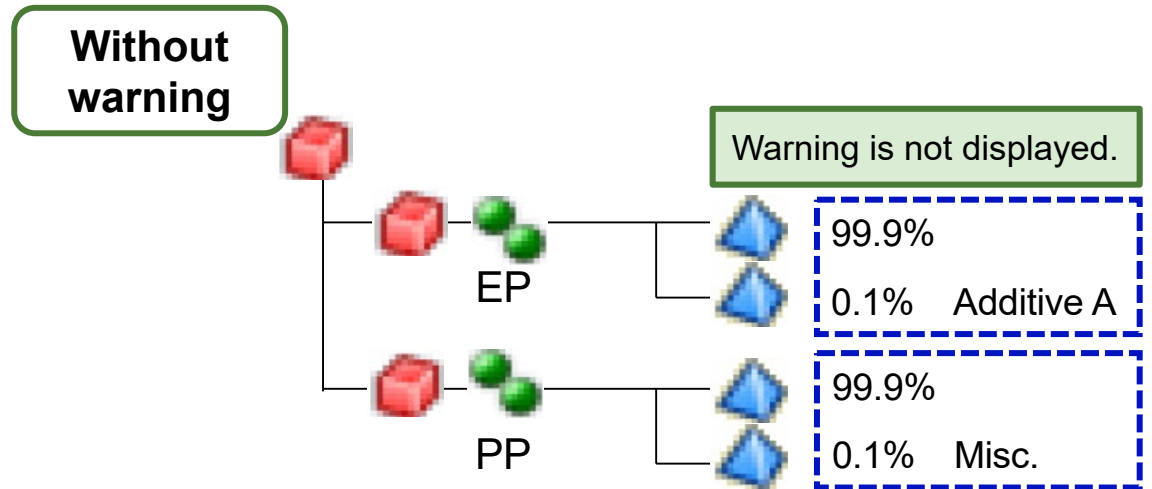
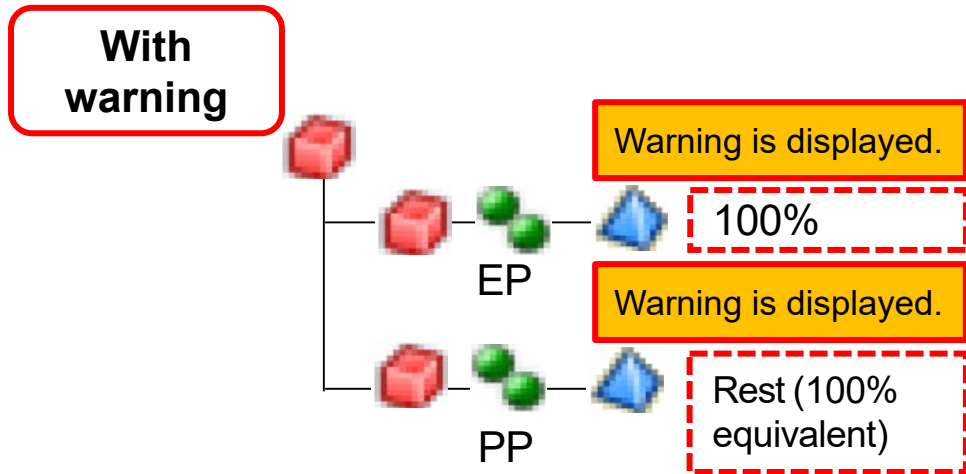
(4) When a component of resin and rubber material is a single compound to give a 100% content rate

[Checking in IMDS: When a Material Data Sheet in which the material is classified in 5.x or 6.x, and composed of 100% of a single chemical is newly created Created]

Refer to (IMDS User's Manual 3.3.17 Check Procedure)

- For a material with material classification, "5.x or 6.x", when the content rate of one substance is 100%, warning is displayed.

(Confirm other additives and add them to the data to prevent omission of additives for resins and rubbers.)



[Note] Report in the status without this warning!

(5) Chromate, water in passive state

[Checking in IMDS: When a material includes more than 1% of liquid or gaseous chemical substance and its material classification is not "9.x", or includes more than 1% of a specified chemical substance]

Refer to (IMDS User's Manual 3.3.17 Check Procedure)

- If the state with water in chromate is right, even if the warning is displayed, report as it is.

The report will not be refused basically even if water is included.

[For your reference]

- The chromate (black) with water included is registered among IMDS Committee-Approved Materials data.

[IMDS published MDS IMDS ID (Material): 73281512 / 4]

The screenshot shows the IMDS software interface with the following components:

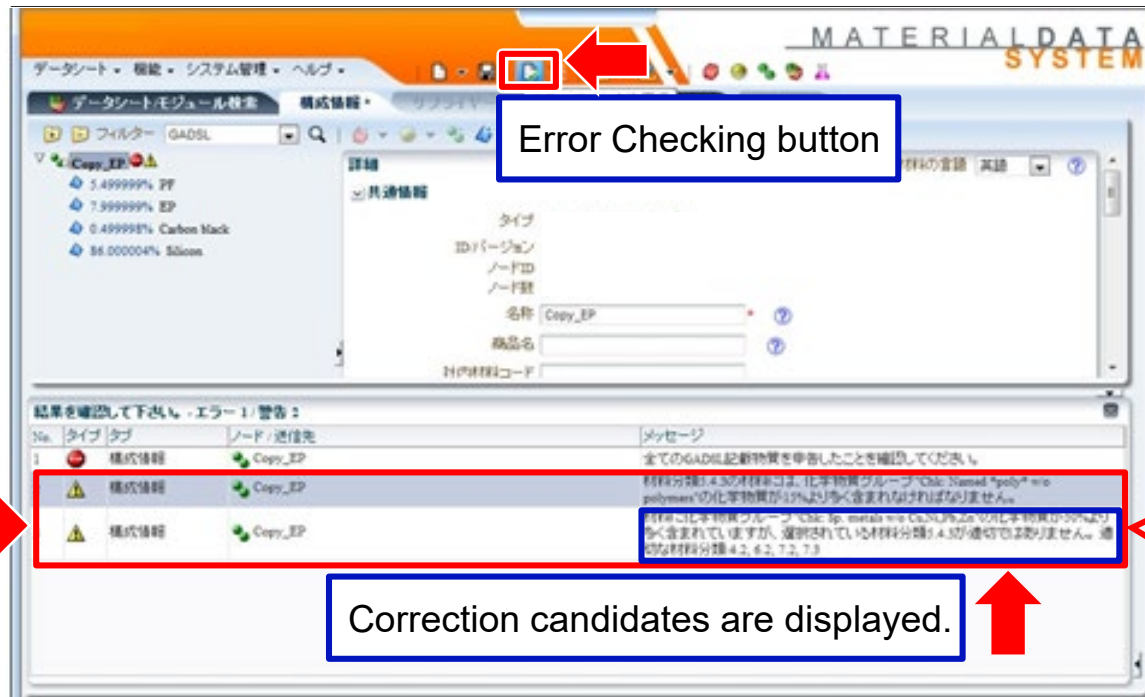
- Navigation Tabs:** MDS/Module Search, Ingredients, Supplier Data, Recipient data, Analysis, MDS Request.
- Filter:** GADSL
- show regulatory information:** Checked
- Material List:**
 - Chromate film black
 - Rest 10.5% Chromium(III)oxide
 - 4.5 - 6.5% Chromium(III)-hydroxide
 - 9.0 - 11.0% Water (highlighted with a red box and a green callout box pointing to it with the text "Including water.")
 - 50.0 - 56.0% Dichromium tris(hydrogen phosphate)
 - 18.0 - 22.0% Zinc-hydroxide
 - 0.0 - 2.0% Misc., not to declare
- Details Panel:**
 - Common Information:**
 - Type: Material (published MDS)
 - ID / Version: 73281512 / 4
 - Node ID: 1119451185
 - Node count: 7
 - MDS Supplier: IMDS-Committee / ILI Metals (highlighted with a red box and a green callout box pointing to it with the text "IMDS Committee-Approved Material is indicated.")
 - Name: Chromate film black

(6) Material classification

[Checking in IMDS: When a material includes more than a specified content rate of a specified chemical substance]

Refer to (IMDS User's Manual 3.3.17 Check Procedure)

- When the warning is displayed by the IMDS Error Checking, confirm the correction candidate indicated on the message field to select the appropriate material classification.
- * Even though the warning is displayed, the material classification may be correct (the appropriate option may not be displayed).



Warning message

Error Checking button

Correction candidates are displayed.

After confirming the "message", make a correction for the appropriate content.



Japan Display Inc.

6 Points for preparing Substance Research Data

- 6-1 Always report substances listed on GADSL
- 6-2 Report substances as in final products
- 6-3 Report in line with the latest design change and material change
- 6-4 Pass Substance Research Data across the supply chain
- 6-5 Report every homogeneous material separately
- 6-6 Report indications with or without Material Properties Indication
- 6-7 Report Parts Masses correctly
- 6-8 How to input glass components
- 6-9 Input a material name in the name field of the Material Data

6-1 Always report substances listed on GADSL

When a substance includes a substance listed on GADSL exceeding the threshold value, entry is mandatory. For highly-confidential substances and confidential substances, the content rate is allowed up to 10%.

Refer to (IMDS Recommendation 001 Rule 3.2.1.D, Rule 4.5.2.C, Rule 4.5.3)

[Points to particularly pay attention to]

(1) When data is created (creating new, updating)

(I) Substances listed on GADSL

- When a substance exceeds the prescribed threshold value, always report that.
- Using a wild card (Highly Confidential Substance, Misc., not to declare and others) for non-disclosure is unavailable.

(II) Wild card (non-disclosure)

- When a wild card is used, comply with "IMDS Recommendation 001 Rule 4.5.3".

* Note that the content rate combining a Highly Confidential Substance with a Confidential Substance shall not exceed 10% in IMDS.

(2) When the data update is necessary (when GADSL is revised)

- When your substance has been listed on GADSL after using a wild card, promptly let us know it.

6 Points for preparing Substance Research Data

[How to check the up-to-date GADSL]

Confirm the list on the link below.

<http://www.gadsl.org/>

Downloading the files, "Contact Information", "**Reference List**" and "GADSL Guidance Document", is available.

The image shows two screenshots of the GADSL website. The left screenshot shows the registration form with a red box around it and a callout bubble. The right screenshot shows the download materials section with a blue box around the download links and a callout bubble. A green arrow points from the registration form to the download materials section.

Entry in the Registration form on the right activates the Download button at the bottom.

Download button

- Contact Information
- **Reference List**
- GADSL Guidance Document

Those files above can be downloaded.

Reference List

Move the cursor over the icon of each file and click to download.

To be continued on the next page

6 Points for preparing Substance Research Data

Open the excel file of [Reference List] downloaded to confirm the GADSL classification as follows.

(2) Click [2].

Important Notice, please read

The GADSL document and the reference list use two main classifications to identify regulatory status, declarable (D) and prohibited (P).

There has been some confusion in the user community over the use of the following classification codes:

When a substance is classified D three reason codes are possible:
D/LR: reporting is required by a regulation;
D/FA: it is being assessed by a regulatory agency for possible but not necessary restriction;
D/FI: information is being collected for a non-regulatory purpose.

In the later two cases the substance may be removed from the list after the assessment process as is the case with several substances that were evaluated under the Carcinogen Review Process. It was determined that no action or restriction on use was necessary to protect human health or the environment.

(3) The Reference List is displayed.

(4) Confirm the GADSL classification.

(1) Click the [Reference List] sheet.

CAS RN	Classification	Reason Code	Source (Legal requirements, regulations)	Effective date (Legal requirements, regulations) Date	Action required	Generic examples	Reporting threshold (0.1% unless otherwise stated)
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			From polymer components	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Resin, used in automobile parts	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Di-capacity capacitors	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Acrylamide (residual monomer)	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Polymers of plastics, e.g. ABS (residual monomer)	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Acrylonitrile	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Alkyl (C7-C9), 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propanoates, mixture of branched and linear	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Alkyl Phenol derivatives, selected	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Amines, coco alkyl	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Amines, which can form carcinogenic Nitrosamines, selected	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			4-Aminobiphenyl and its salts, all members	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Ammonium Nitrate (AN)	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Ammonium perchlorate	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Aniline and its salts, all members	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Anthracene, 1,4-bis[2-dichloro-1,9-dihydro-2-methyl-9-oxo-9H-pyrazolo[5,1-b]quinoxolin-3-yl]azo-, (Pigment Red 25)	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Antimony trioxide (Diantimony trioxide)	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Aromatic amines, selected	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Arsenic and its compounds, all members	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Asbestos fibers, all members	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Asbestos minerals, all members	
101-76-3	D	LR	Reg. (EC) No 1907/2006 (REACH)			Azodyes that can form carcinogenic amines, selected	

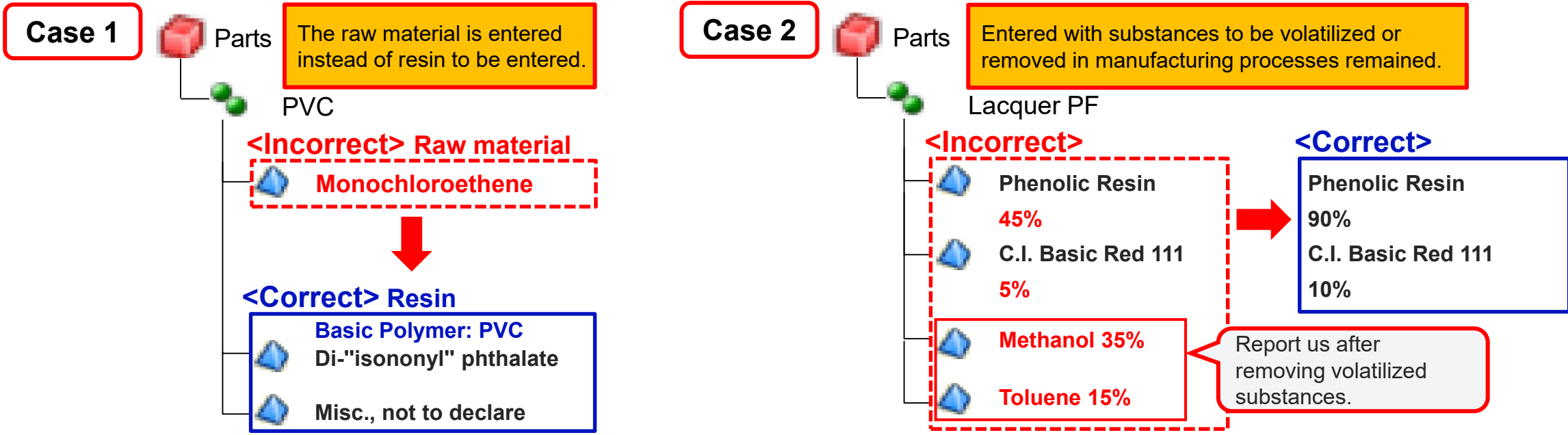
6-2 Report substances as in final products

Enter the substance finally included in the product.

Refer to (IMDS Recommendation 001 Rule 4.4.1.B, Rule 4.4.1.C)

[Points to particularly pay attention to]

- (1) As for resins, report the product state (component) delivered to us instead of raw materials used for manufacturing resins.
- (2) As for coating materials and adhesives, report the state after curing, excluding substances (process chemicals) to be volatilized or removed in manufacturing processes.
- (3) As for polarizers and tapes etc., report the state excluding protective film, marking ink and separator.



6 Points for preparing Substance Research Data

For your reference: Options for resins (Basic Substance)

- Report the final product state delivered to us instead of raw materials.
- As for resins, since the options (Basic Substance) are available below, use them for confirmation to material manufacturers or other objectives.
- The list below describes one of examples of compounds for resins. Many options such as other resins and polymer alloys (resins with several resins mixed) that are not defined in JIS are registered to use.

Material Name (Japanese)	Material Code (JISK6899-1)	Options in IMDS (Compound Name)
Acrylonitrile-butadiene-acrylic ester plastic	ABAK	Basic Polymer: ABAK
Acrylonitrile-butadiene-styrene plastic	ABS	Basic polymer: ABS
Acrylonitrile-chlorinated polyethylene-styrene	ACS	Basic Polymer: ACS
Acrylonitrile-(ethylene-propylene-diene)-styrene plastic	AEPDS	Basic Polymer: AEPDS
Acrylonitrile-methyl methacrylate plastic	AMMA	Basic Polymer: AMMA
Acrylonitrile-styrene-acrylic ester plastic	ASA	Basic Polymer: ASA
Cellulose acetate	CA	Basic Polymer: CA
Cellulose acetate butyrate	CAB	Basic Polymer: CAB
Cellulose acetate propionate	CAP	Basic polymer: CAP
Cellulose formaldehyde	CEF	Basic Polymer: CEF
Cresol formaldehyderesin	CF	Basic Polymer: CF
Carboxy methyl cellulose	CMC	Basic Polymer: CMC
Cellulose nitrate	CN	Basic Polymer: CN
Cycloolefin copolymer	COC	Basic polymer: COC
Cellulose propionate	CP	Basic polymer: CP
Cellulose triacetate	CTA	Basic Polymer: CTA
Ethylene-acrylic acidplastic	EAA	Basic Polymer: EAA
Ethylene-butyl acrylate plastic	EBAK	Basic Polymer : EBAK
Ethyl cellulose	EC	Basic Polymer: EC
Ethylene-ethyl acrylate plastic	EEAK	Basic Polymer: EEAK
Ethylene-methacrylic acid plastic	EMA	Basic Polymer: EMA
Epoxide, epoxy resin or epoxy plastic	EP	Basic Polymer: EP
Ethylene-propylene plastic	E/P	Basic Polymer: E/P
Ethylene-tetrafluoroethyleneplastic	ETFE	Basic Polymer: ETFE

Material Name (Japanese)	Material Code (JISK6899-1)	Options in IMDS (Compound Name)
Methyl methacrylate-butadiene-styrene plastic	MBS	Basic Polymer: MBS
Methyl cellulose	MC	Basic Polymer: MC
Melamine-formaldehyde resin	MF	Basic Polymer: MF
Melamine-phenolic resin	MP	Basic Polymer: MP
α-Methyl styrene-acrylonitrile plastic	MSAN	Basic Polymer: MSAN
Polyamide	PA	Basic Polymer: PA
Polyaryl ether ketone	PAEK	Basic Polymer: PAEK
Polyamide imide	PAI	Basic Polymer: PAI
Polyacrylate	PAK	Basic Polymer: PAK
Polyacrylonitrile	PAN	Basic Polymer: PAN
Polyacrylate	PAR	Basic Polymer: PAR
Polyaryl amide	PARA	Basic Polymer: PARA
Polybutene	PB	Basic Polymer: PB
Polybutyl acrylate	PBAK	Basic Polymer: PBAK
1,2-Polybutadiene	PBD	Basic Polymer: PBD
Polybutylene terephthalate	PBT	Basic Polymer: PBT
Polycarbonate	PC	Basic Polymer: PC
Polycyclohexylenedimethylene-terephthalate	PCT	Basic Polymer: PCT
Polychlorotrifluoroethylene	PCTFE	Basic Polymer: PCTFE
Polydiallylphthalate	PDAP	Basic Polymer: PDAP
Polydicyclopentadiene	PDCPD	Basic Duomer: PDCPD
Polyethylene	PE	Basic Polymer: PE
Polyethylene, chlorinated	PE-C	Basic polymer: PE-C
Polyethylene, high density	PE-HD	Basic Polymer: PE-HD

To be continued
on the next page

6 Points for preparing Substance Research Data

Following the previous page

Material Name (Japanese)	Material Code (JISK6899-1)	Option in IMDS (Compound Name)
Ethylene-vinyl acetate plastic	EVAC	Basic Polymer: EVAC
Ethylene-vinyl alcohol plastic	EVOH	Basic Polymer: EVOH
Perfluoro (ethylene-propylene) plastic	FEP	Basic Polymer: FEP
Furan-formaldehyde resin	FF	Basic Polymer: FF
Liquid crystal polymer	LCP	Basic Polymer: LCP
Methyl methacrylate-acrylonitrile-butadiene-styrene plastic	MABS	Basic Polymer: MMABS
Polyether ester	PEEST	Basic Polymer: PEEST
Polyether imide	PEI	Basic Polymer: PEI
Polyether ketone	PEK	Basic Polymer: PEK
Polyethylene naphthalate	PEN	Basic polymer: PEN
Polyethylene oxide	PEOX	Basic Polymer: PEOX
Polyester urethane	PESTUR	Basic Polymer: PESTUR
Polyether sulfone	PESU	Basic Polymer: PES
Polyethylene terephthalate	PET	Basic Polymer: PET
Polyether urethane	PEUR	Basic Polymer: PEUR
Phenol-formaldehyde resin	PF	Phenol-formaldehyde Resin
Perfluoro alkoxyalkane resin	PFA	Basic Polymer: PFA
Polyimide	PI	Polyimide
Polyisobutylene	PIB	Basic Polymer: PIB
Polyisocyanurate	PIR	Basic Polymer: PIR
Polyketone	PK	Basic Polymer: PK
Polymethacryl imide	PMI	Basic Polymer: PMI
Polymethylmethacrylate	PMMA	Basic Polymer: PMMA
Poly(N-methylmethacrylimide)	PMMI	Basic Polymer: PMMI
Poly(4-methylpenta-1-ene)	PMP	Basic Polymer: PMP
Poly(α-methyl styrene)	PMS	Basic Polymer: PMS
Polyoxymethylene, polyacetal, polyformaldehyde	POM	Basic Polymer: POM
Polypropylene	PP	Basic Polymer: PP
Polypropylene, foamed	PP-E	Basic Polymer: PP-E
Polypheylene ether	PPE	Basic Polymer: PPE
Polypropylene oxide	PPOX	Basic Polymer: PPOX
Polypheylene sulfide	PPS	Basic Polymer: PPS
Polypheylene sulfone	PPSU	Basic Polymer: PPSU
Polystyrene	PS	Basic Polymer: PS
Polystyrene, foamed	PS-E	Basic Polymer: PS-E
Polystyrene, impact-resistant	PS-HI	PS-HI (HIPS)

Material Name (Japanese)	Material Code (JISK6899-1)	Option in IMDS (Compound Name)
Polyethylene, low density	PE-LD	Basic polymer: PE- LD
Polyethylene, linear low density	PE-LLD	Basic polymer: PE-LLD
Polyethylene, medium density	PE-MD	Basic polymer: PE-MD
Polyethylene, ultrahigh molecular weight	PE-UHMW	Basic polymer: PE-UHMW
Polyester carbonate	PEC	Basic Polymer: PEC
Polyether ether ketone	PEEK	Basic Polymer: PEEK
Polysulfone	PSU	Basic Polymer: PSU
Polytetrafluoro ethylene	PTFE	Basic polymer: PTFE
Polytrimethylene terephthalate	PTT	Basic Polymer: PTT
Polyurethane	PUR	Basic Polymer: PUR
Polyvinyl acetate	PVAC	Basic Polymer: PVAC
Polyvinyl alcohol	PVAL	basic Polymer: PVAL
Polyvinyl butyral	PVB	Basic Polymer: PVB
Polyvinyl chloride	PVC	Basic Polymer: PVC
Polyvinyl chloride, chlorinated	PVC-C	Basic Polymer: PVC-C
Polyvinylidene chloride	PVDC	Basic Polymer: PVDC
Polyvinylidene fluoride	PVDF	Basic Polymer: PVDF
Polyvinyl fluoride	PVF	Basic Polymer: PVF
Polyvinyl formal	PVFM	Basic Polymer: PVFM
Poly-N-vinylcarbazole	PVK	Basic Polymer: PVK
Poly-N-vinylpyrrolidone	PVP	Basic Polymer: PVP
Styrene-acrylonitrile plastic	SAN	Basic Polymer: SAN
Styrene-butadiene plastic	SB	Styrene-butadiene rubber
Silicone plastic	SI	Silicone resin
Styrene-maleic anhydride plastic	SMAH	Basic Polymer: SMAH
Styrene-α-methyl styrene plastic	SMS	Basic Polymer: SMS
Urea-formaldehyde resin	UF	Basic Polymer: UF
Unsaturated polyester	UP	Basic Duromer: unsaturated polyester resin
Vinyl chloride-ethylene plastic	VCE	Basic Polymer: VCE
Vinyl chloride-ethylene-methyl acrylate plastic	VCMAK	Basic Polymer: VCMAK
Vinyl chloride-ethylene-vinyl acetate plastic	VCEVAC	Basic Polymer: VCEVAC
Vinyl chloride-methyl acrylate plastic	VCMAK	Basic Polymer: VCMAK
Vinyl chloride-methyl methacrylate plastic	VCMAK	Basic Polymer: VCMAK
Vinyl chloride-Octyl acrylate plastic	VCOAK	Basic Polymer: VCOAK
Vinyl chloride-vinyl acetate plastic	VCVAC	Basic Polymer: VCVAC
Vinyl chloride-vinylidene chloride plastic	VCVDC	Basic Polymer: VCVDC

For your reference: How to input epoxy resins

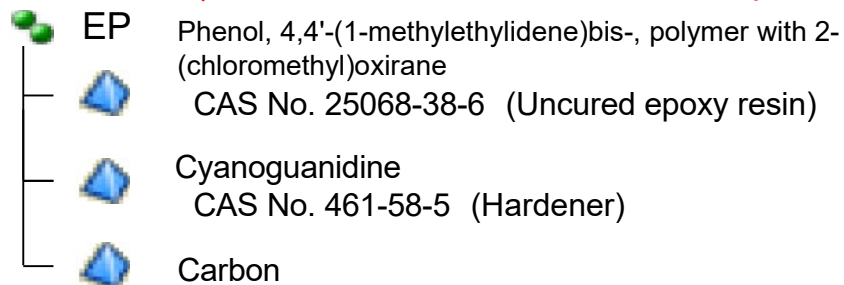
- [Rule]
- Description in cured state is needed for resins used for adhesives and sealants.
 - When a chemical substance under the cured state to declare is included in the product, declaration (reporting) of the substance is necessary. Refer to (IMDS Recommendation 001a)
- [Recommendation]
- It is recommended to use basic substances such as Basic Duromer: Epoxy resin (without CAS No.) for cured epoxy resins other than chemical substances to declare. Refer to (IMDS Recommendation 012)

[Points on input]

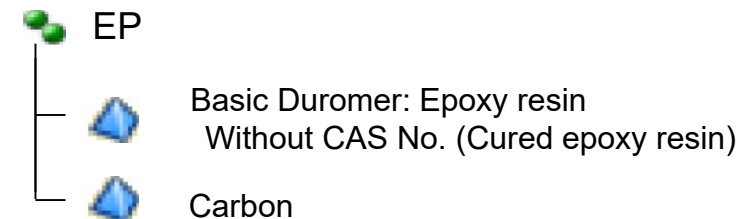
- When both uncured resins and hardeners are input, input* both for basic substances together.
- Unless hardeners are coexistent with uncured resins, input* uncured resins as basic substances.
 - * If cured epoxy resins are also entered in the data received from suppliers, uncured resins and hardeners may be unreacted. Always ensure that suppliers state whether unreacted substances remain or not and their content rates. If the unreacted substance remains, correction is unnecessary.
- When an unreacted resin is a brominated substance, select Basic Duromer: Brominated epoxy resin for a basic substance. (Refer to the next page. Select the most appropriate basic substance.)

Case

<Incorrect> (The unreacted substances are reported)



<Correct> (The correct example with completely cured substances)



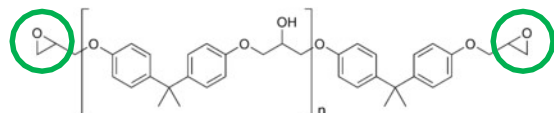
6 Points for preparing Substance Research Data

How to deal with states before and after the curing in the diagrams below. While an unreacted epoxy resin may be cured itself, a substance with the two epoxy groups (functional group with oxygen included) in one molecular cannot cure itself as below, resulting in the state without geometrically cross-linked* structure to be uncured.

* Even if this uncured resin may be solidified itself because of a large molecular weight, the product is thermoplastic (linear aggregate) but unable to cure (form a network structure).

<Uncured resin>

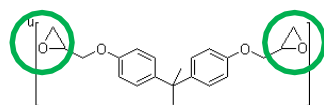
CAS No. 25068-38-6



<Cured resin>

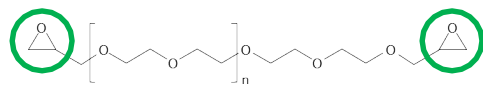
Without CAS No.
Basic duomer: Epoxy resin

CAS No. 25085-99-8



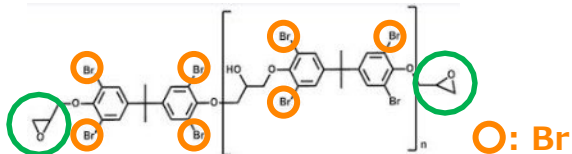
Without CAS No.
Basic duomer: Epoxy resin

CAS No. 25928-94-3



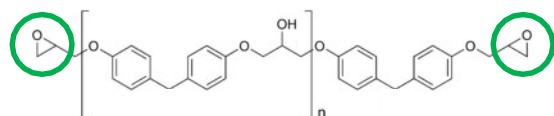
Without CAS No.
Basic duomer: Epoxy resin

CAS No. 40039-93-8



Without CAS No.
Basic duomer: **Brominated** epoxy resin

CAS No. 58421-55-9



Without CAS No.
Basic duomer: Epoxy resin

[Reaction intermediates of epoxy resins and urethan resins]

One of examples of reaction intermediates of epoxy resins and urethan resins are shown in Table A and B below. **Report those substances by using basic substances and other measures after confirming states of final products.**

<Table A> Reaction intermediates of epoxy resins

CAS No.	Chemical Name
25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane
58421-55-9	Phenol, methylenebis-, polymer with (chloromethyl)oxirane (9Cl)
25928-94-3	Diethylene-glycol,-polymer-with-1-chloro-2,3-epoxypropane
40039-93-8	Phenol, 4,4'-(1-methylethylidene)bis(2,6-dibromo-, polymer with (chl...
25085-99-8	Oxirane, 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bi...
25036-25-3	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-((1-methylethylidene)bis(4,1-phenyleneoxymethylene))bis(oxirane)
29690-82-2	Formaldehyde, polymer with (chloromethyl)oxirane and 2-methylphenol
28064-14-4	Phenol, polymer with formaldehyde, glycidyl ether

<Table B> Reaction intermediates of urethan resins

CAS No.	Chemical Name
9009-54-5	Polyurethane
9016-87-9	Diphenylmethanediisocyanate, isomeres and homologues
68400-67-9	1,3-Butanediol, polymer with alpha-butyl-omega-hydroxypoly (oxy(methyl-1,2-ethanediyl)) and 1,3-diisocyanatomethylbenzene
101325-00-2	Carbonic acid, dimethyl ester, polymer with 1,6-hexanediol
282534-15-0	Dimethyl carbonate polymer with 1,6-hexanediol and 2-oxepanone
171926-76-4	Polycarbonatediol (PCD)
216691-97-3	Carbonic acid, dimethyl ester, polymer with 1,4-cyclohexanedimethanol and 1,6-hexanediol
103837-45-2	1,2-Propanediol, polymer with 1,1'-methylenebis[isocyanatobenzene], methyloxirane and oxirane
113066-13-0	Urethane acrylate prepolymer
9057-91-4	Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer with 1,3-diisocyanatomethylbenzene
68083-75-0	1,2-Propanediol, polymer with 1,1'-methylenebis(4-isocyanatobenzene), 2-methyloxirane and oxirane
68092-58-0	Propanol, ((1-methyl-1,2-ethanediyl)bis(oxy))bis-, polymer with 1,1'...

Those CAS No.s are removed after reactions. Select appropriate substances that resins include after chemical reactions. For example, select "Without CAS No. Epoxy resin", "Without CAS No. Polyurethane resin or PUR" or others.

6-3 Report in line with the latest design change and material change

When a new material is added or a material already reported is removed from a part, revise the corresponding data sheet and send it.
Refer to (IMDS Recommendation 001 Rule 3.2.1.B)

[Points to particularly pay attention to]

- If Substance Research Data are changed due to the design change and changing and adding of materials or other reasons, re-submission is necessary.

Example of change: Coating layer one layer \Rightarrow change to coating layer two layers

Example of change: Product with lead included \Rightarrow change to lead-free product

6-4 Pass Substance Research Data across the supply chain

Pass Material Data across the supply chain (Tier n \Rightarrow Tier n-1 \Rightarrow ... Automobile manufacturers) The Material data Sheet shall be created by material-producing companies only.

Refer to (IMDS Recommendation 001 Rule 3.1.A, Rule 4.4.1.E)

[Points to particularly pay attention to]

- Material manufacturers are advised to input material component information.
- Parts manufacturers are advised to use Material Data received from material manufacturers to create parts data.

6-5 Report per homogeneous material separately

Enter separately per homogeneous material.

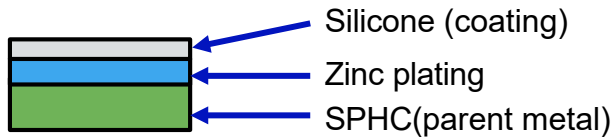
Refer to (IMDS Recommendation 001 Rue 4.4.1.D, 001a 1.1 Select the material classification in IMDS)

[Points to particularly pay attention to]

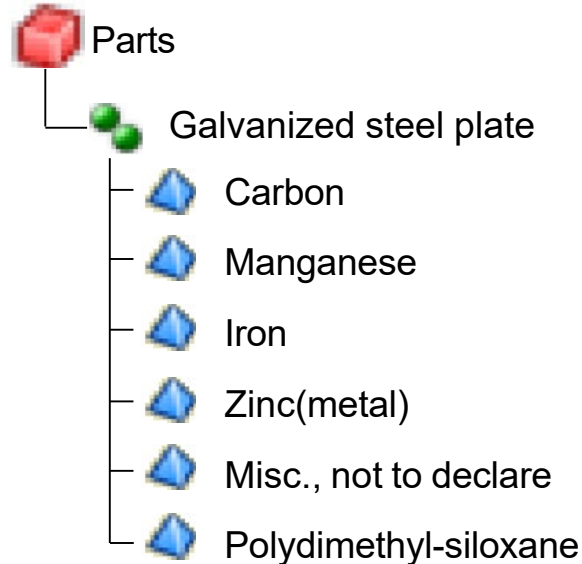
- "Homogeneity" of a homogeneous material means a homogeneous material composition that can never be simply separated into several materials.

Make sure that the material is described as the homogeneous material.

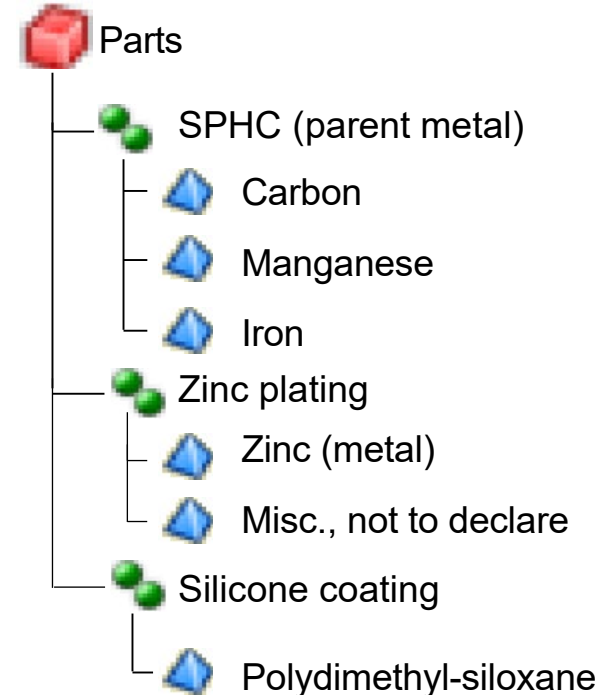
Case



<Incorrect>



<Correct>



6-6 Report indications with or without Material Properties Indication

A case corresponding to the following conditions requires a response with Material Properties Indication.
Reference value: "Material Classification 5.1.x or 5.4.x" and "Exceeding 100g", "Material Classification 5.2 or 5.3" and "Exceeding 200g"
Refer to (IMDS User's Manual 3.3.11 Polymeric Parts Marking)

[Points to particularly pay attention to]

- Since "N (No)" means that the Material Properties Indication is not provided even though the material indication is necessary, avoid making "N (No)" response, because that is unusual.
*When the mass is not more than the reference value and the Material Properties Indication is not provided, make a "N/A (not applicable)" response.
- The response for Material Properties Indication is necessary if component parts in ASSY items purchased meet conditions of material classification and masses.

6-7 Report Parts Masses correctly

Correct masses (Parts Masses) need to be specified.
Refer to (IMDS Recommendation 001 Rule 4.2.2.A)

[Points to particularly pay attention to]

- Referring to confirming masses in the drawings and the actual measurement, report correct masses.

6-8 How to input glass components

[Recommendation]

- Regarding newly-created data sheets for glass, silicate ceramics and enamels, description of simple materials including a single (basic) chemical substance is necessary. If it is unable to change the data, the existing data is continuously available.
- A material with a chemical substance to declare included need to be additionally specified according to the general rule of the "IMDS Recommendation 001".

Refer to (IMDS Recommendation 001a 2.6 MDS creation for glass, silicate ceramic and enamel)

[Points on input]

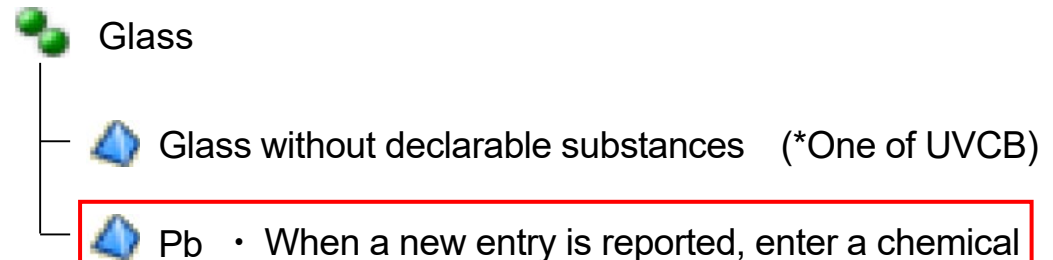
- When new data is created, use UVCB* only.
- * UVCB : Substances of Unknown or Variable composition, Complex reaction products or Biological materials
(Substances of Unknown or Variable composition, Complex reaction products or Biological materials)

Case

<Incorrect>



<Correct>



- When a new entry is reported, enter a chemical substance to declare, only Pb, separately.
- Refrain from entering the raw material "PbO".

6-9 Input a material name in the name field of the Material Data

- Input a material name in the name field of the Material Data Sheet.
Refer to (IMDS Recommendation 001 Rule 4.4.2 Information Given in Material MDSs)
- Avoid using a commercial name for the material name.
Refer to (IMDS Recommendation 001 Rule 4.4.2.B)

【Points to particularly pay attention to】

- When a name is provided by official material standards (such as JIS and ISO), always enter the official name.

If the name above is unable to use, input as follows.

- (1) The material can be specified and the specified name can be provided
(Example : Carbon steel, Stainless steel, etc.)
- (2) Material Marks and Codes registered on the JAPIA sheets
(Example : such as FE, AL, SINTERFE, ABS, PC)







The screenshot shows the 'MDS/Module Search' interface. The 'Ingredients' tab is active, displaying a list of components for 'SUS304': 70.0 - 80.0% Iron, 0.4 - 0.5% Silicon, 0.0 - 0.1% Carbon, 1.0 - 2.0% Manganese, 0.0 - 0.1% Phosphorus, 0.0 - 0.1% Sulphur, 8.0 - 9.0% Nickel, and 18.0 - 19.0% Chromium. The 'Details' panel on the right shows 'Common Information' with fields for Type, ID / Version, Node ID, Node count, MDS Supplier, Name (highlighted with a red box and containing 'SUS304'), Trade name, Internal Mat.-No., and Preliminary MDS (set to 'No').

Input a material name.
Example: SUS304

To be continued
on the next page

6-9 Input a material name in the name field of the Material Data

When the material name is input below, it is insufficient. Input the right name. (Our customers may reject it)

Insufficient case	Main cases	Example of insufficient input (underlined in red)
The name other than the material is input.	The name of component parts is input.	 <u>FINISHING</u>
		 <u>CENTER TAPE</u>
Though the material name is input, the other name is also input.	The commercial name is input.	 <u>XYZ-001</u>
	The name of component parts is input.	 <u>SHEET PC</u>
	The commercial name is input.	 <u>EP_RIGHT SIDE</u>
		 <u>INK ABC-002</u>

To be continued on the next page

6-9 Input a material name in the name field of the Material Data

How to enter a location where a material is used (Component Parts Information) is indicated below. For differentiating the identical materials in the component, this measure can be used.

How to deal with errors

<Incorrect>

The screenshot shows a tree view under 'PRODUCT' with two items: '1.0g EP LEFT SIDE' and '1.0g EP RIGHT SIDE'. A red dashed box highlights the text 'LEFT SIDE' and 'RIGHT SIDE'. A red arrow points from a yellow text box below to the 'LEFT SIDE' text.

The name other than the material name has been input.

<Correct>

The screenshot shows a tree view under 'PRODUCT' with two components: '1x LEFT SIDE' and '1x RIGHT SIDE'. Each component has a sub-entry for '1.0g EP'. A blue box highlights the components. A red callout box points to the components with the text: '(1) Create a component to input Component Parts Information.' Another red callout box points to the '1.0g EP' entries with the text: '(2) Use the correct material name to correct the Material Data to place the data under the component.'

6-10 Report as material or semi-component for MDS Type, as for components whose delivered unit and JDI usage unit are different




As for components such as color filters that are delivered in large plates and separated into individual parts at JDI, report as material or semi-component for MDS Type as per unit area/volume/length.

Refer to (IMDS User's Manual 3.3.1 MDS Types)

3.3 Materials and Component MDSs

3.3.1 MDS Types

The following table describes and helps differentiate Components, Semi-Components and Materials:

MDS Type	Description	Can be attached to	Can have child nodes	Has weight field
 Material	Represents a homogeneous structure – if a slice were taken through the item, there would be no layers or visible differentiation (exception for electronic components).	Materials, Semi-Components, Components	Material, Substance	No
 Semi-Component	Similar to a material, this represents a structure that will require further processing before it is assembled and given a final weight. Examples are a steel blank or a coated wire. Usage is by length, by volume, or by area.	Semi-Components, Components	Semi-Component, Material	No
 Component	Used to represent an assembly or component with a defined weight and used in whole number quantities. Examples include a bolt, an engine block, a seat, etc. The weight of a Component MDS is defined at creation and cannot be reduced in the structure.	Components	Component, Semi-Component, Material	Yes

Quoted from (IMDS User's Manual 3.3.1 MDS Types)



Japan Display Inc.

7 Contacts

Please access the contact point for inquiries as follows regarding IMDS such as How to operate the system/Registration/How to input/How to create data/Training/Manual/Rules/How to carry out settings.

[IMDS Service Center]

- Japan

E-mail: jpimds-helpdesk@dx.com

TEL: 03-4530-9270

- Other countries than Japan

Refer to the link in the following.

<https://public.mdsystem.com/ja/web/imds-public-pages/imds-service-centers>

For inquiries in regard to JDI Specific Requirements, contact the following point.

Japan Display Inc. Product Environment Department Green Procurement Help Desk

E-mail: green.proc.zz@j-display.com

Ver.	Date of revision	Key revision points
1.00	Feb. 9, 2023	Newly created
1.01	Sep. 13, 2023	Revised "4-6 Application Code" and "4-8 Recyclate Information." Newly created "6-10 Report as material or semi-component for MDS Type, as for components whose delivered unit and JDI usage unit are different."



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