

IMDS manual for Toyota options

Version 1.1

1. Introduction

This manual is intended to explain to Toyota's suppliers what are **Toyota's options in IMDS**. This means it is not a complete training manual for the International Material Data System.

Those options need to be used by Toyota's Tier 1 suppliers but also by Tier 2, Tier 3, ... So, Toyota strongly recommend the **Tier 1 suppliers to pass the information to Tier 2 suppliers and so on**. If Tier 2 suppliers did not follow Toyota's requirements, Tier 1 suppliers will have to correct the data before submitting the datasheets to **Toyota Motor Corporation (TMC, ID number 10674)**.

Concerning the structure of the datasheets, Toyota would like its suppliers to **follow the recommendations** set up by the car manufacturers (see the chapter "Recommendation" in the menu after login in IMDS). Those documents explain to the users:

- the general structure of a datasheet and the different fields to fill in,
- how to build a datasheet for:
 - complex parts (like circuit boards, wire harnesses, ...),
 - coated metal sheets and coated components,
 - fasteners,
 - leather and fabric,
 - paint and coatings,
 - ...

If you are not yet a user of this system, you can visit IMDS' website:

www.mdsystem.com Going to the "Public IMDS Pages", you will then get information on:

- the system requirements and the online registration ("System"),
- the training possibilities ("Training")
- e-mail addresses and phone numbers to contact EDS in case of questions about IMDS ("Contact"),
- frequently asked questions ("FAQ"),
- and many other things.

2. Toyota options

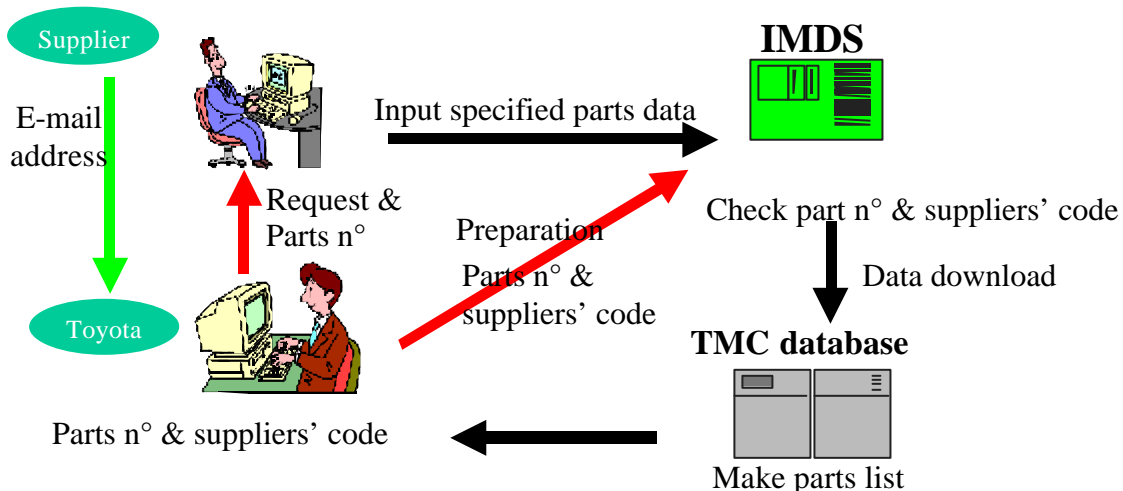
2.1 *Toyota's data collection procedure*

Toyota doesn't request its suppliers to enter data for all supplied components at once. Suppliers have to collect the material data for the parts specified by Toyota as a priority. When data collection is required, **TMC will send an e-mail with a list of parts and a timetable** to each Tier 1 supplier. This e-mail is automatically sent via our in-house system (e-mail address: fv-peis@mega.tec.toyota.co.jp). It is addressed to **two people** in each company:

- the **daily contact** for commercial matters: he doesn't receive the parts list (the e-mail is intended to inform the supplier work has to be done for Toyota),
- the **IMDS contact** person: he receives the parts list and should organise the data collection and make sure it is done on time. If the person we contacted isn't the right one, a new person should be indicated to Toyota with the help of the questionnaire (see appendix 3).

Here is an overview of the **workflow** between IMDS and Toyota's internal data collection system. Starting from the parts list of a Toyota vehicle, each Tier 1 supplier gets the list of parts for which he has to enter data in IMDS. When the datasheets are submitted, they are downloaded in TMC's internal database (called PEIS) and the system will check if they are fulfilling Toyota's requirements.

Part numbers and timeframe specification



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Here is an **example of the list** your **IMDS contact person** receives when Toyota needs new data:

n°	Due date	Supplier code	Delivery part n°	Supplied part No.	Supplied part mass [g]	Quantity / Part	Comment
1	2002/10/30	1234	17411-0G060- A				
2	2002/10/30	1234	18450-0G010- C	18461-0W500	1480	1	TOYOTA Supplied Part
3	2002/10/30	1234	17410-0G040- D				
4	2002/10/30	1234	T90174-10025				
5	2002/10/30	1234	T17413-0G060				

The last 4 columns will be empty if none of the components contained in the part listed is supplied by Toyota. In the case you have to input data for a **Toyota supplied part**, you have to proceed the following way:

- create the component supplied by Toyota into the datasheet structure (■) and give it the part number mentioned in the above table,
- create a dummy material called “supplied part”, with the characteristics listed in the below table:

Material Name	In-house norms	Material Number	Quantity / Delivery Part	Basic substance
Supplied part	TSA1111	TOYOTA	1	Miscellaneous

Toyota will directly enter the data for the supplied parts in its internal data collection system. So you don't have to ask for that information as long as you are using the codes listed above.

2.2 Toyota's requirements for data collection

The **data entry** procedure is the same as for the standard IMDS software. The creation of the datasheet with the **parts** (assemblies, sub-assemblies, single parts, components,... having a part number), **semi-components** (semi-finished products without part number and limited dimensions only!), **materials** and **substances** is identical to the one described in EDS' training manual. See also the recommendation document 001 (General Structure).

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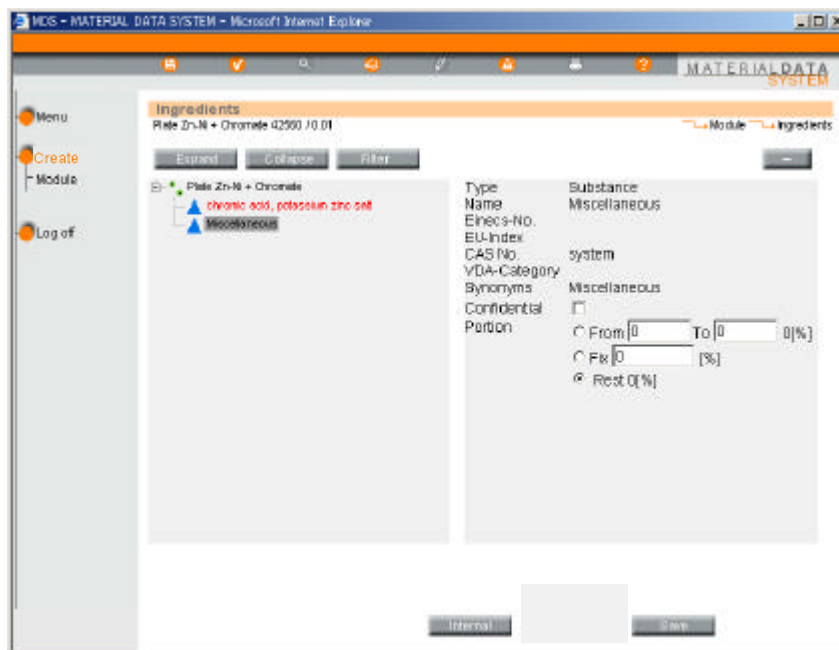
However, to ensure a good transmission of the IMDS datasheets in Toyota's internal data collection system (PEIS), the datasheets have to fulfil some **requirements** at the material and substance levels:

- **100 % material reporting** is mandatory (• sum up to 100 %),
- the material **standard code** (ISO****, JIS****, ...) **and** the material **number** (from the steel and iron list for example) **or** the material **symbol** (from the ISO1043-1 standard for plastics, for example) are required (*),
- as a starting point, only the **banned, restricted** (very first priority) **and monitored substances** listed in Toyota SoC list have to be declared.

(*) **Remark:** If the standard code and/or the material number or material symbol are missing, a **warning message** will appear when submitting the datasheet to TMC. It is strongly recommended to give this information. If not applicable, it is however possible to ignore the warning and proceed further with the submission of the datasheet.

Here is a standard material datasheet in construction. At the substance level, banned, restricted and monitored substances from Toyota's SoC list have to be declared. If such a substance is part of the VDA list too, it will automatically be highlighted in red. Both lists are similar but not exactly the same.

When the **banned, restricted** (very first priority: before July 2003) **and monitored substances** data are introduced, the rest of the material composition (basic substances) can be considered globally with the help of a wild card called "Miscellaneous". It means that for a material that doesn't contain any substance from Toyota's SoC list, the whole composition can be reported as a unique virtual basic substance "Miscellaneous". If no basic substance at all (not even "Miscellaneous") is reported, an error message will appear.



2.3 Indication of the amount of recycled material

In the standard IMDS software, it is possible to give the **percentage of recycled material used in a part** before submission of a datasheet but it is not an obligation. We recommend you to fill in the “recyclate information” screen if you know this information.

The screenshot shows the 'Recyclate information' screen in the MDS - MATERIAL DATA SYSTEM. The browser title is 'MDS - MATERIAL DATA SYSTEM - Microsoft Internet Explorer'. The page header includes 'MATERIAL DATA SYSTEM' and navigation links for 'Create', 'MDS', and 'Recyclate'. The main content area is titled 'Recyclate information' and includes the part number 'ASSY-A 52577 / 0.01'. A note states 'Note: Chapter 2 is optional.' Below this are four numbered input fields:

1. Amount of contained recyclate - as released? %
2. Amount of contained recyclate - as measured? %
3. Amount of contained recyclate - post industrial recyclate? g, %
4. Amount of contained recyclate - post consumer recyclate? g, %

Below the input fields, there is a message: 'The substance screen needs to be filled out completely.' and a 'Comment:' field with a text area. At the bottom, there are 'Back', 'Save', and 'Next' buttons. A red circle highlights the first input field.

When it is filled in, you can push on the “Next” button to go to the following screen “Create/MDS/Supplier data”.

2.4 Supplier data

On the screen “Create/MDS/Supplier data”, you find the supplier’s company name. It is the name of your company as it has been registered in IMDS (login name of one Toyota supplier).

Here, you have to choose the **name of the responsible person** (most probably yourself) who will be the **contact** for the datasheet you are going to submit. Her or his e-mail address will appear automatically afterwards (see as an example, the screen when somebody from TMC gives the information before sending to TMC).

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Supplier data
COMPACT_STOREM2STOREM1001

MDS Status: Edit mode

Company: TOYOTA MOTOR CORPORATION
1, TOYOTA-CHO
471-6672 Toyota
JP (Japan)

Organisation unit: TOYOTA MOTOR CORPORATION

Contact Person: Lepage, Karel

Telephone No.: ++32 2 712 34 21

Fax No.: ++32 2 712 32 56

Email address: karel.lepage@toyota-europe.com

active: Yes

Buttons: Add, Send, Next

When the contact person choice has been made, you can push on the “Next” button to go to the next screen “Create/MDS/Recipient data”.

2.5 Recipient data

With the help of the screen “Create/MDS/Recipient data” (A on the picture next page), you can select **Toyota Motor Corporation** as the recipient for your datasheet. To do so, you have to:

- push on the “Add” button,
- you get a second screen: “Company” (B on the picture),
- in this screen, write “T” or “Toyota” in the “Company name” field, or “10674” in the “Company ID” field.
- push on the “Search” button,
- you get a list of companies, depending on your entry,
- select “**TOYOTA MOTOR CORPORATION**” (ID number: 10674),
- push on the “Apply” button at the bottom of the screen,
- screen marked A becomes screen marked C,
- push on the “Send” button in screen C,
- you get screen D,
- enter your **supplier code**, which is a number made of **4 digits** (for this information, no search function exists, but your supplier code is indicated in the table with the parts list you receive per e-mail),
- then push on the “Next” button.

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A

Recipient data
Component_3129540 3129540 / 0.01

MDS Status: Edit mode

Internal Publish

No.	Recipient (Org.-Unit)	Description	Part/Item No.	Drawing No.	Recip. Status
1	TOYOTA MOTOR CORP	TOYOTA MOTOR C...			edit mode

B

Company - MS Internet Explorer provided and restricted by TMME

Administration Company search

Search Criteria:

Company Name: Toyota Company-ID:

Org.-Unit:

zip code:

User Name:

City:

User ID:

Max hits: 25

Total records found: 8.

Company Name	Org.-Unit	ID	zip code	City
1 Toyota Industries Europe	Toyota Industrie Cor	14330	418 8471	2-1 Toyoda cho, Kar
2 TOYOTA MOTOR CORP	TOYOTA MOTOR C...	10674	471-8577	Toyota
3 Toyota Tsusho America Inc	Toyota Tsusho Ameri...	2995	48075	Southfield, MI
4 Toyota Tsusho America, Inc	Toyota Tsusho Ameri...	12217	N9E 1A3	Cambridge
5 Toyota Tsusho Canada Inc	Toyota Tsusho Cana...	15067	N9E 1A3	Cambridge, ON
6 TOYOTA TSUSHO CORP	TOYOTA TSUSHO C...	15851	103-8655	chuo-ku, tokyo
7 TOYOTA TSUSHO EURO	TOYOTA TSUSHO F...	9824	40210	Düsseldorf
8 Toyota Tsusho Europe U...	Toyota Tsusho Europ...	14030	00640	Istanbul

C

Recipient data
Component_51914 51914 / 0.01

MDS Status: Edit mode

Send Propose Internal Publish

No.	Recipient (Org.-Unit)	Description	Part/Item No.	Drawing No.	Recip. Status
1	TOYOTA MOTOR	Component_51914			edit mode

D

Supplier Code Validation

Recipient: Toyota

Recip. Status: edit mode

Supplier Code:

Next Cancel

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When the **supplier code** has been entered successfully, you get a new screen allowing you to give the part number of the component for which you want to submit the datasheet. You can either **directly input the part number** (also for a component for which you didn't receive a request from TMC to submit data) **or** first **have a look to the parts list** for which the data has been requested (push on the "Search" button). The part number is a **10 digits number** (sometimes 11 digits if a letter is added at the end for colour differences). When typing the part number by yourself, you should omit the "T" preceding the 10 digits in some cases and the "-" separating the 10 digits in 2 groups (used to ease reading).

The image displays three screenshots of the IMDS web application interface, illustrating the search process for a part number.

The top-left screenshot shows the "Company data" form with the "Supplier Code" field set to "2222" and the "Search" button highlighted. An arrow points from this button to the top-right screenshot.

The top-right screenshot shows the "Part/Item No. Search" screen. The "Search Criteria" field is empty, and the "Search" button is highlighted. An arrow points from this button to the bottom-left screenshot.

The bottom-left screenshot shows the "Company data" form with the "Part/Item No." field set to "222222222A" and the "Search" button highlighted. An arrow points from this button to the bottom-right screenshot.

The bottom-right screenshot shows the "Part/Item No. Search" screen with the search results displayed. The "Total records found" is 3. The results are as follows:

No.	Part/Item No.	Date
1	222222222A	11/16/2001
2	222222222B	11/16/2001
3	222222222C	11/16/2002

In the case you are using the search function:

- you get the screen on the right side,
- first, enter a search criteria (beginning of a part number or even nothing),
- push on the "Search" button,
- you get a choice list,
- select the right part,
- push on the "Apply" button.

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If the part number you entered isn't listed, you might get a warning message. In that case, please check that the part number is correct and proceed further.

The right part number being selected, different fields still need to be filled in:

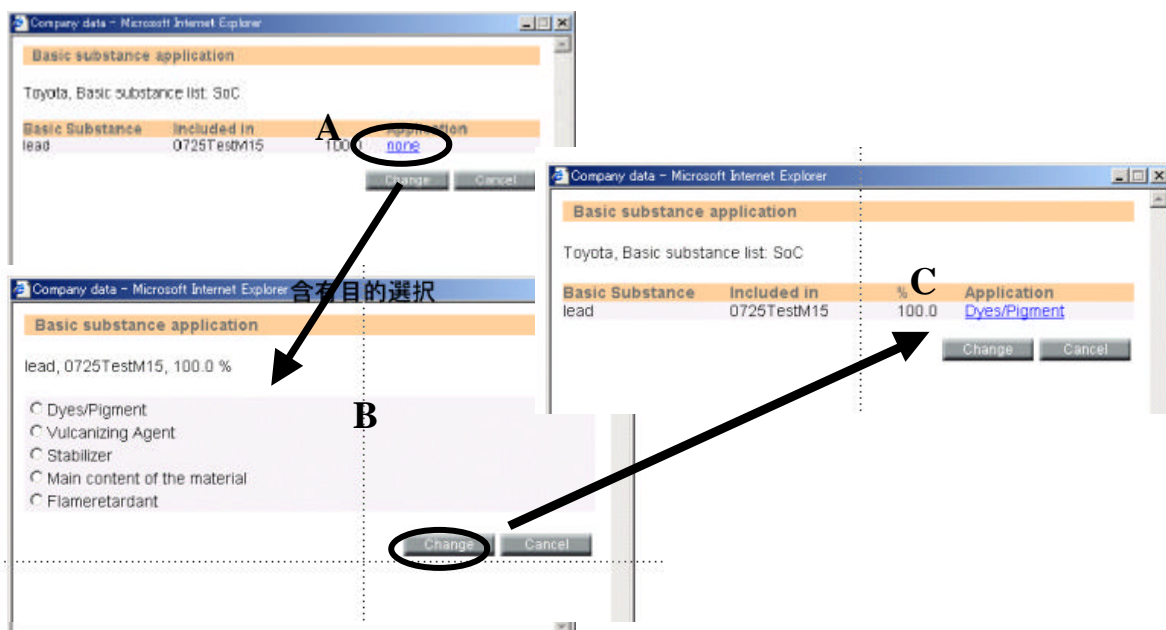
- drawing change level: this information is required as it will be automatically checked by our internal system (PEIS) after downloading. **If** it is **missing**, we will get an error message and **send you a notice** with a request to complete this field. The drawing change level allows us to make the difference between the Engineering Changes Instructions (ECI) and to know if the submitted data are up-to-date. Those ECI numbers are **on the drawing**. **If** there is none (**first drawing**), you have to write “**PEISS0001**”.
- date of report: this field is also **required**
- material quality mark: check “Yes” if the part has an inscription as described in the international standards ISO11469 (Plastics - Generic identification and marking of plastic products), ISO1043 (Plastics - symbols and abbreviated terms) or ISO1629 (Rubbers and lattices - Nomenclature): e.g. “>PP<” for polypropylene.
- recycle mark: check “Yes” if the part shows the recycle mark as regulated:



When the different fields are complete, push on the “Next” button.

You will get the **next screen only if** the datasheet you submit contains **substances listed in Toyota SoC list** (or in TSZ0001G). The substances will then appear and you have to check the purpose of their usage in the part:

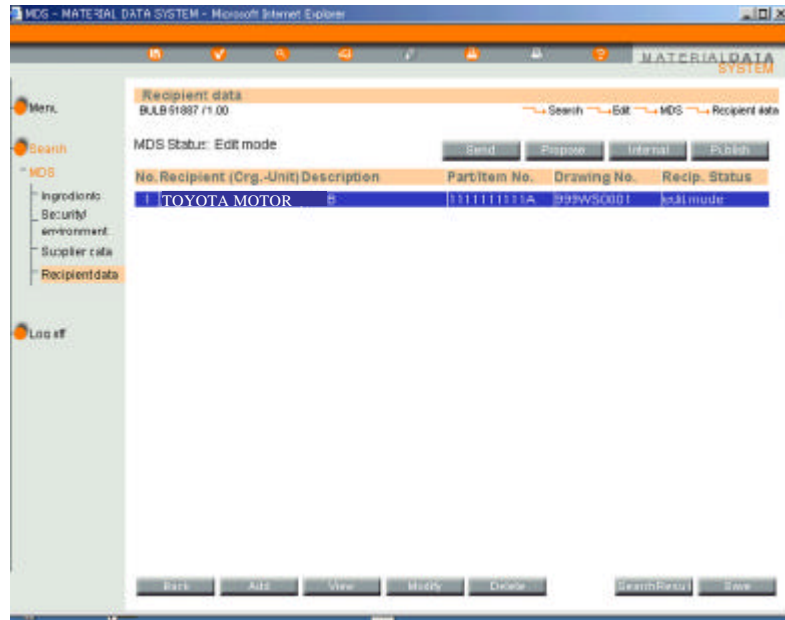
- select the application to modify (**A**) by clicking on the application kind,
- check the right purpose of usage (**B**),
- push on the “Change” button,
- push on the “Change” button (**C**: same screen as A again but with the modification).



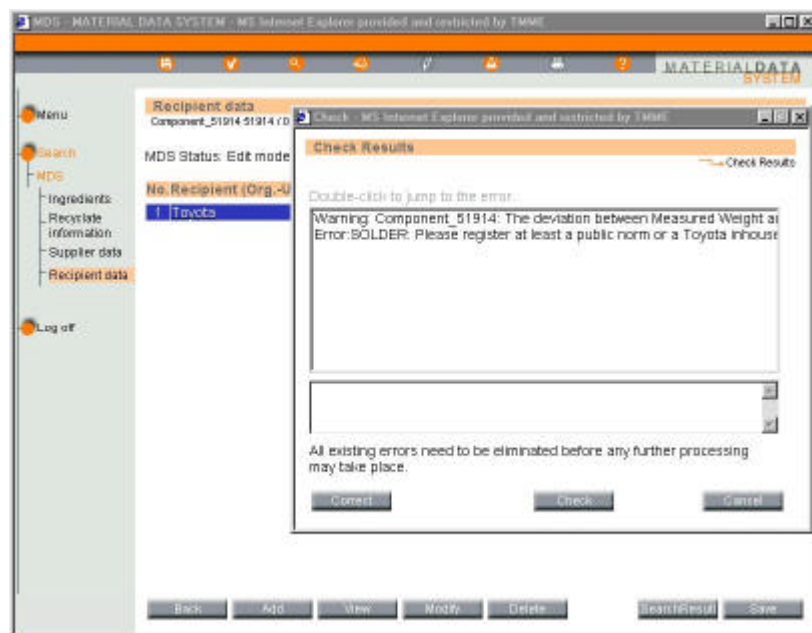
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2.6 Send datasheet

The supplier code, the part number, the purpose of substance usage, etc. having been filled in, you come back to the main submission screen:



Push on the “Send” button. If the information is complete, the “Check Results” screen is empty and the datasheet can be submitted to **Toyota Motor Corporation**, with ID number 10674, (push the “Send” button). **If** there is something missing, the screen won’t be empty and you will get an **error message** (second line in the next screen) telling what needs to be modified before submission:



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You may also get a warning message (first line of the previous screen). This means you should check you didn't forget to give this information (e.g. a standard material code) before submission but you can proceed further.

3. More questions?

If you have questions on the general usage of IMDS, please contact IMDS Service Centre directly (cf. Introduction).

If you have questions on Toyota's specific options, please contact:

Muriel Lepage
Material Engineering Division
Toyota Motor Europe

E-mail: muriel.lepage@toyota-europe.com
Phone: + 32 2 712 34 51
Fax: + 32 2 712 32 56

Remark: See also the appendix documents. They should help you understand the data collection flow and the required information for different types of materials.

Appendix 1

Toyota data collection flow and required information

Registration of supplier's contact address	Supply Toyota with the e-mail address of the person who will be our contact in your company, receiving the investigation requests from TMC (cf. IMDS questionnaire copied in Appendix 3).
Part numbers list for the investigation	Receive a list of part numbers for which the data collection in IMDS is required and a deadline for this.
Material data: - norms/standard - material number - material symbol - substances	For the material data, fill in the following fields: - "material number": for steel for example, - "material symbol": for plastics for example, - "norms / standard" : public ones or Toyota ones For the substances not listed in Toyota's SoC list, the wild card "Miscellaneous" may be used.
Part number	Input the part number. Don't use the "semi-component" symbol (●) if the product has a part number but the "part" symbol (■). Make sure to enter data for every component with a Toyota part number: don't make one group for an assembly, omitting the structure of your part.
Percentage of recycled material used	Input the percentage of recycled material used in the part described by the datasheet.
Supplier code	Input your Toyota supplier code (4 digits number).
Toyota part number	Input or select the part number of the part you investigated (10 digits number).
Drawing change level	Input the design change number. If the drawing is issued for the first time, write "PEISS0001".
Material identification mark	Choose "Yes" if the part has a mark as specified by the international standards ISO11469, ISO1043 or ISO1629 (e.g. ">PP<").
Recycling mark	Choose "Yes" if the part has the recycle mark regulated by the law (triangle formed by 3 arrows, see page 9).
Purpose of substance usage	Select the purpose of substance usage for all the substances listed in Toyota SoC list, the possible purposes are specified by Toyota.

Appendix 2

Procedure for material information entry: Toyota’s specifications

When are you allowed to omit the basic substances data input?

If you enter the following data, you can omit to input the full basic substance data by using the wild card “Miscellaneous”.

1. You entered a **material standard number**:
 - TS (Toyota Standard): select “Toyota” + “TS” and write the number specified on the drawing (this standard has to specify the material type),
 - international standards (ISO, DIN, BS, JIS, etc.): select “public norms” + “ISO” or “DIN”, etc and write the rest of the number,
 - internal standard: select “Toyota” + “TS” and write your own standard number (there is no other possibility to mention an internal standard).
For example, if your standard number is “SPI-123” and your own material number is “SUP-P-567”, you can fill in:
* “TS SPI-123” in the material “standard/norm” field,
* and “SUP-P-567” in the “material number” field.
2. You entered a standard code in the **“material number”** or **“material symbol”** field:
 - material number: for steel,
 - material symbol: for plastics (like specified in the ISO11469 standard),

In both cases, please specify in the **“norm/standard”** field the standard this number or symbol is coming from (Toyota standard, international standard or in-house standard).
3. You entered the information concerning the substances listed in Toyota’s SoC list (or in the TSZ0001G Toyota Standard).

Here are some examples:

1. Case 1: The material standard specified by Toyota doesn’t show the existence of SoC

Material name	Standard number	Standard code	Content				+ SoC
			C	Si	Mn	P	
Carbon & alloy steel for machine structural use	ISO683-1	C45	0.5	0.1	0.5	0.045	

Norms / Standards	Material number	Minimum basic substances to be reported
ISO683-1	C45	Miscellaneous + SoC

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2. Case 2: The material standard specified by Toyota includes a SoC

Material name	Standard number	Standard code	Content					+ SoC
			C	Si	Mn	P	Pb	
Free-cutting steel	ISO683-9	118MnPb28	C	Si	Mn	P	Pb	
			0.1	0.1	1.3	0.11	0.35	



Norms / Standards	Material number	Minimum basic substances to be reported
ISO683-9	118MnPb28	Miscellaneous, Pb, + SoC

3. Case 3: Exceptional electronic components

In case you are using many light components of the same type like resistors or condensers, you can input data after compiling these components into one group.

However, you cannot include any Toyota part number into this group. And, you have to enter for the group of electronic components, “**TSA2222**” as **material standard** and “**FFGG**” as **material code**.

Part name	Part number	Material name	Standard number	Standard code	Quantity	Mass (g)	SoC (%)
Resistor	8897654321	Other electronics			10	1.2	
		Solder	ISO9453	S-Sn60Pb38Bi2	10	0.3	40

Material standard for the components specified by Toyota (TSA2222)

Material name for the grouped electronic components

Material symbol specified by Toyota for the components (FFGG)

Material name	In-house standard	Symbol	Quantity	Mass (g)	SoC (%)
Other electronics	TSA2222	FFGG	10	1.2	
Solder	ISO9453	S-Sn60Pb38Bi2	10	0.3	40

Materials containing SoC cannot be omitted

IMDS: Toyota options manual

You can group the following electronic components and materials as shown above in the following cases.

Material name	In-house standard	Material Number
Discharge lamps and instrumental panel displays	TSA2222	ELHG
Glass in bulbs	TSA2222	BUGL
Electrical components which contain lead in a glass or ceramic matrix compound	TSA2222	ELGC
Stabiliser in protective paints	TSA2222	SPPA
Solder in electronic circuit boards and other electric applications	TSA2222	ELSL
Pyrotechnic initiator in airbag	TSA2222	ABPP
Thick film pastes	TSA2222	ELTP
Other electronic parts	TSA2222	FFGG

4. Case 4: Material input for Toyota supplied parts

If a Toyota supplied part is contained in the part you have to investigate (part number you received via e-mail), you have to create a **dummy material** called “**Toyota supplied part**” and enter “**TSA1111**” as **standard number** and “**Toyota**” as **material number** for the Toyota supplied part.

n°	Deadline for reply	Supplier code	Delivery part n°	Toyota supplied part n°	Component part mass [g]	Quantity / Part	Comment
1	30/10/2002	1234	17411-0G060- A				
2	30/10/2002	1234	18450-0G010- C	18461-0W500	1480	4	TOYOTA Supplied Part
3	30/10/2002	1234	17410-0G040- D				
4	30/10/2002	1234	T90174-10025				
5	30/10/2002	1234	T17413-0G060				

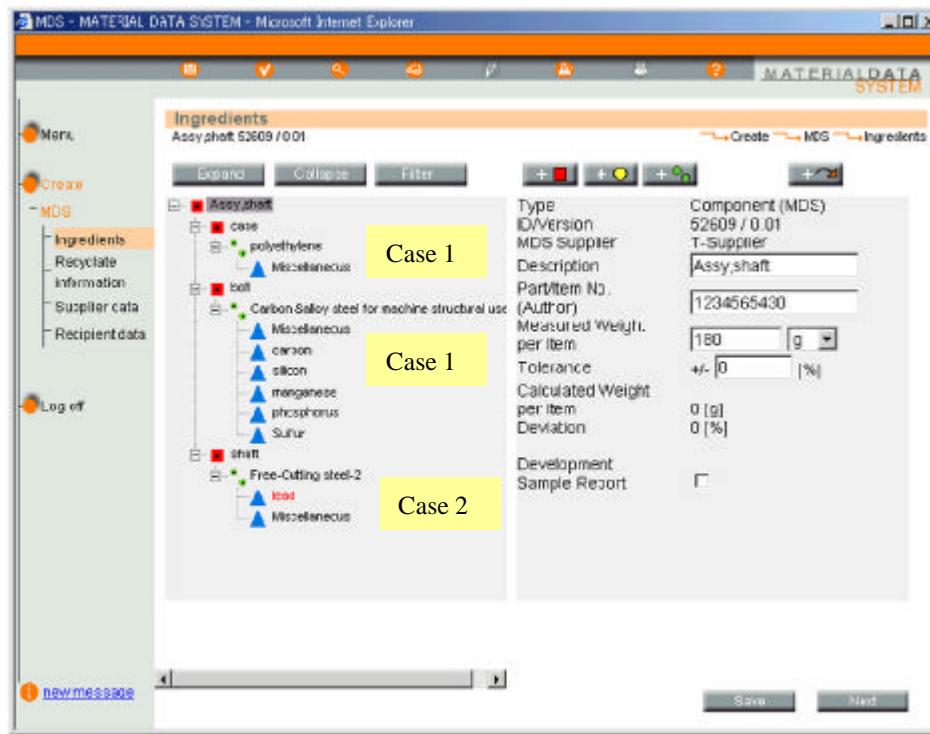


Material Name	In-house norms	Material Number	Quantity / Delivery Part	Minimum basic substances to be reported
Supplied part	TSA1111	Toyota	4	Miscellaneous

In picture

Case 1: The material standard specified by Toyota doesn't show the existence of SoC

Case 2: The material standard specified by Toyota includes a SoC



Appendix 3

IMDS questionnaire

COMPANY NAME
SUPPLIER CODE
IMDS CONTACT PERSON
ADDRESS
PHONE NUMBER
FAX NUMBER
E-MAIL ADDRESS

**To be filled in every time there is a change in responsibility in your company.
Please return by e-mail or by fax to:**

Muriel Lepage
Material Engineering Division
Fax number: + 32 2 712 32 56
E-mail: muriel.lepage@toyota-europe.com