Create Tips: component

Version: IMDS Release 11.0
Introduction

This presentation gives a recommended step-by-step procedure for creating MDSs in the IMDS, with an emphasis on the creation of components.

While this presentation gives recommendations on how to input data, it does not replace the individual OEM requirements that can be found on the IMDS Information Pages > Help > OEM Specific Info

nor does it replace specific product recommendations.

**Note:** These examples have been developed in the Model Office environment and represent demonstration data only.
Table of Contents

Basic MDS Structure
Locate Recommendations
How to Search
Create a Component
Recyclate Information
Application Codes
Parts Marking
Release Referenced Datasheet
Adding Component Directly in Tree
Adding Recipient
Send vs. Propose
Creating a Semi-component
Basic MDS Structure

In IMDS, the requirement is to reduce all parts to Basic Substances.

The system allows mixing of types at the same level (siblings). However, there are some OEM and Tier One that require all siblings to be of the same type. Therefore, understand your customer’s requirements before expending a lot of effort. Please review Recommendation 001 and other recommendations that pertain to your product.

Mixing types will generate a Warning
Where To Find Recommendations

The Recommendation menu opens the following screen: IMDS 001 is what is commonly referred to as Recommendation 001.
How to Search for a Component
The best way to find anything in IMDS is by IMDS ID. Also, ...

Determine if it was created by your company or another.

Use wild card searches (e.g. if looking for published SAE 1010 steel, use *1010 in the Name field).

Begin by selecting Component Search from the functions menu or the toolbar. Then select the Filters.
Filters – Component Search Page II

**Name** – the name given on the Ingredients page

*Note: If you cannot find the MDS, you may want to do a wild card search.*

**Part/Item No.** – the Part/Item number from the Ingredients page

*Note: If you cannot find the MDS, you may want to do a wild card search.*

**ID** – the IMDS ID number / Version

- **Current versions:** Displays the highest version number or all the versions in edit mode if your company created it. Or the highest version number that you have visibility to if another company created it.

- **All versions:** Lists all versions of the specified component.

**Preliminary MDS** – if yes, will return only the MDSs with “Preliminary MDS” checked on the Ingredients page.
Filters – Creation and Release Dates

Published / accepted / internally released – this option will return only released MDSs (whole number version) and whether they are created by your own company or a supplier or both will depend on how you set other flags on this screen.

Created (own MDSs) – this option will return only MDSs created by your company, regardless of whether they have been released or not.

Date from/to – this option will limit your results to MDSs released during the time frame (if first box checked) or created during the time frame (if second box checked).
Note: The dates must be given in the specified format. Only MDSs have the date tracked (as opposed to modules).

Regulation Request – with this option, the result only shows MDSs for which regulation requests (in a certain time period) have been received.
Filters – Supplier MDSs

You can limit your search for Supplier MDSs to data from a select list of suppliers.

Accepted MDSs – returns only data that has been accepted by your company.

Published MDSs – returns only data that has been published.

Supplier – adding suppliers will restrict search returns to only the suppliers listed. See next page for how to add/remove suppliers and a more complete discussion of how this works.

Save List – saves the supplier list for future sessions. This list is saved to the login ID.

The “save list” from this Search screen is also attached to the MDS Inbox allowing a company to have users focused on certain suppliers. There is a second “save list” available on the MDS Outbox.
Filters – Add to Supplier List

To add another supplier to the list shown, click on the add button. A screen appears for Search Criteria, where you can either search on a Company or an Org.-Unit.

After the result list returns, select your supplier and click Apply.
Filters – Remove from Supplier List

To remove a supplier from the Supplier list, first highlight the supplier to remove (HPE Service Desk in this example) and then click on the
Filters – Organizational Info

**Own MDSs** – the search results will include MDSs created by your company

**Own Modules** – the search results will include modules created by your company

**Assigned Org.-Unit** – the search result will be limited to MDSs assigned to a particular Org.-Unit

**Assigned Contact** – the search result will be limited to MDSs associated with the contact person selected. Contacts are populated by the Client Manager under Administration > Contact Person

**Last edited by me** – the search result will be limited to those MDSs or Modules last edited by the user ID currently logged in

**obsolete** – will list own MDSs marked as obsolete
Create a Component
IMDS Hierarchy

Be aware of the rules about the hierarchy (tree structure) in IMDS when creating a component or semi-component.

Think of the tree structure in IMDS in terms of a “parent” and “child” relationship:

A **Material** “parent” can only have materials or substances as “children”.

A **Semi-component** “parent” can only have semi-components or materials as a sub-node or “children”.

A **Component** “parent” can have components, semi-components, or materials as a sub-node or “children”.

A “parent” in IMDS can have several “children”. However, Recommendation 001 says that all “children” of the same parent must be of the same type. This means that you may have to introduce a component or semi-component into your tree structure that wouldn’t normally be there and attach the semi-component or material to it in order to keep all the children of the same parent the same type.

You can easily “change” a material or semi-component into a component by attaching it to a component “parent”. You cannot change a component into anything lower.
First, Select MDS or Module

Select from the Create menu options:

MDSs require all information to be filled in: Ingredients, Supplier Data, Recipient Data

Modules only require Ingredients to be defined as the rest gets set when used in an MDS. Modules cannot be send to customer or get assigned to an Org.-Unit.
Next, Choose Component / Semi-component

Most of the MDSs entered in IMDS are either Components or Materials. However, there is a need for the Semi-component.

**Component** – represents a part, or a placeholder in the tree structure to make the structure meet IMDS Recommendation 001 requirements. It has weight and is used in an assembly in whole numbers (e.g. 1 of n, 2 of n)

**Semi-component** – represents a product that is used per weight, length, volume. It does not have weight until added to a component, although in Release 7.0, a function was added to track the density. Examples: leather hide, wire, etc.

Select New > Datasheet > Component.
Fill in the Ingredient Details

Fill in the Description and Part/Item No – it is how you refer to the item within your company and used for finding it later.

Theoretically, anything can be used for the Part/Item No. and Description – but if it will later be attached to another tree, some OEM and hence Tier One may have other requirements.

If the part is to be sent to a customer, their Part number and Description must appear in the Recipient Data because they see values from the Recipient Data in their view, not the values shown on this screen.

You must change the default Description. The name shown depicts the number of MDSs created, 905428947. Make the name descriptive.
Fill in the Weight

Enter the weight, select the units, and select the tolerance percentage (%).

Tolerance is not the same as the part design, but used for checking to see if all the component weights sum correctly.

In this example, the weight is 120 g.

Weight – fill in the weight and then select the units.

Note: Metric units used
Add the Structure

Under a component, you can add other Components, Semi-components or Materials.

Let’s start with a material since you will probably have a component made of all materials initially.

Click on the Add a Material reference button.

Add an existing component to the tree – or create one “on the fly”.

Add an existing semi-component to the tree – or create one “on the fly”.

Add an existing material to the tree.
Apply Material

To add a Material for Fasteners:
Select Published MDSs.
Search using the wildcard in the name field, *fasteners.

Note: If you select a material that does not have a whole number version, you will have to come back later and release it before you can release or send the component.
Add the Material Weight

All the information except the weight is from the Material MDS – you cannot change anything except the weight.

Fill in the Weight and Units – in this case the component has 100g of this material.

Save and run the check.

2. Run Check

1. Fill in Weight and select units

Note that the version of this material is 8 – it is released. You cannot make changes on a released MDS.
Result of Check – Errors

Measured weight – 120 g
Calculated weight – 100 g
Either add more material or change one of the weights

Review and resolve errors
Weight Changed

Top node weight changed so now deviation is 0.
Recyclate Information

Recyclate is the recycled content of the material. Although it is associated with the material, the recyclate input fields appear only when the material is added to a component or a semi-component.

If the material contains Recyclates, select the type and enter the percentage present:

**Post industrial** recyclates might come from injection molding, rejected parts, etc.

**Post consumer** recyclates might come from scrapped and damaged vehicles, packaging wastes, scrapped household appliances, etc.

This information is important as there are some governments that give rebates for using recycled materials and there is a requirement in the future to be using recycled content.
Add Recyclate Information

If the material is applicable for Recyclate information, you can only add it if you are in edit mode (version is a decimal and the MDS is not in “handshake” status).

Unless you selected ‘Yes’, all values will be grayed out.

Fill in information if desired/required
Application Codes

There is also an Application information field. That means that one or more of the substances on the tree structure is a substance that requires an application code to indicate how the substance is used.

Since Nickel requires an application, there is a new field.
Application-Relevant Substances

There are only certain families of substances that require you to indicate how you are using the substance. They are:

– Lead
– Mercury
– Cadmium
– Hexavalent Chromium
– Polycyclic Aromatic Hydrocarbon (PAH)
– Nickel (Nickel only, not the family)

For further information on the possible application codes, see IMDS Information Pages > Help > FAQ > MDS Ingredients screen > Is there any further explanation as to how to select an Application ID?
Application Dialog

Based on the material classification, the substance and the weight the system will make a suggestion. (This example is for illustrative purposes only.)

You can double-click on the entered Application to see the other options – you can only make changes if the MDS is in edit mode.

Note: Although the system may suggest an application code, it is the responsibility of the user to ensure that the correct application is selected.

For more information on the possible applications see IMDS Information Pages > Help > FAQ > MDS Ingredients screen > Is there any further explanation as to how to select an Application ID?
Add Material Requiring Parts Marking

If an MDS is created/modified, the Parts Marking information may need to be supplied when the MDS meets all the following criteria:

The parent node is a component.

At least one child node of the component parent node is a material with one of the 5.* classifications.

Select the Add a Material reference button to add a material that requires Parts Marking data.

Note: Multiple information fields only appear when the material is selected (not when the top node is viewed). However, do not contact the supplier of the material MDS to add the application code – you must add the application when adding the material to the tree.
Component is selected (top node). At this point, because a material with a Polymer classification was just added, you're being asked if you've physically marked the part.

**Note:** If you click on the question mark nearby the dropdown box, you will get the complete explanation of what you should be doing. If you're unsure, you should have someone go out and look at a part that's ready to leave the plant and check to see if it is marked.
Polymeric Parts Marking Question

This question will occur if the component has a material attached that falls under one of the following material classifications:

5.1.a filled Thermoplastics
5.1.b unfilled Thermoplastics
5.2 Thermoplastic elastomers
5.3 Elastomers / elastomeric compounds
5.4 Duromers
5.4.1 Polyurethane
5.4.2 Unsaturated polyester
5.4.3 Other duromers
5.5.1 Plastics (in polymeric compounds)
5.5.2 Textiles (in polymeric compounds)

To answer this question you need:
Access to the drawing
Access to the part

Did you mark your polymeric part(s) according to respective applicable ISO Standards (e.g. ISO 1043, ISO 1629, ISO 18064, ISO 11469)?

Yes (Parts are marked as required on drawing)
No (Parts are not marked as required)
Not applicable (Parts do not require marking due to specifications of weight, geometric restrictions or surface requirements)
Need More Recyclate Information?

Once again, you may have to answer the Recyclate question.
You have to increase the weight after adding the last material.

“Attaching” is also called “Referencing”.

Run the Check now.

**Run the Check.**

**Changed weight.**
Run the Check

Adding the last material we forgot to give it a weight (first error).

The first Warning is because of the second entry (error).

The Errors have to be fixed before proceeding. Start with highlighting the first Error and double-click on it to fix it.
Releasing Referenced Datasheet

Release the MDS by using the Release Internal button in Recipient data (see page 40).

If not released there will be a “modify” button.

Version .01 is meaning: Not released.

Modify leaves the MDS you are working on and goes directly to the one that isn’t released.
Material Released

Now the material is released.

You can return to the main MDS (top node).

Note: If your Company/Org.-Unit and your user ID have been authorized for publishing, there is an additional button available to “Publish” the MDS.

Button to go back to where you were.
Now the weight problem is fixed and the material is released.

Running the check again shows an Error and a Warning.

This Warning is acceptable so you can ignore it.

Need to fix the contact Error.
Supplier Data

Contact is added on the Supplier Data page.

Select the Organization Unit if applicable.

Select the Contact Person.

Click on tab “Recipient data” to release the MDS.
The correction has been made and you can go directly to the Recipient data screen and choose Release Internal.

**Note:** Although the system allows you to Release, Send, and Propose with Warnings, that does not mean it will meet your customer’s requirements.

**Click on Release Internal.**

**Note:** The Send and Propose buttons are grayed out – you cannot use them until you add a recipient.
Component Released

Component is internally released.

Now go back to Menu and to Create another component.

Status changed

Now Release Internal is also grayed out – you can still Send and Propose, should you add a recipient.

Version number changed (whole number)
New Component – Assembly

This is going to be an assembly of existing components.

Enter the total weight. Click on the “Add a Component reference” button.

When the screen comes up, search on own.

Note: Referencing is also known as “Add an existing MDS”.

Add existing MDS.

Enter total weight and units.
Attach / Reference First Component

The component you just created is selected.

Click on Apply.
Assembly Updated and Added

Doesn’t look like there’s much to do beyond indicating how many of these are in the assembly.

To add another component, you must click on the top node of the tree.

Enter how many of these are going to be in the assembly.
Prepare for Second Component

Going to be creating a plated component: To maintain tree structure according to Recommendation 001, you are going to have to create a place-holding component for the plating.

Although Materials must be created separately, you can create a sub-component in the tree – it exists only in this tree structure.

Create a sub-component “on the fly” by clicking on the “Add Component Node” button.
Add Second Component and Check

Add a Description for this second component.

Save.

Click on the toolbar icon to run the Check.
Result of Check – Errors

No quantity has been specified for the added component.

No materials are contained in the component.

No weight has been entered for the component.

Therefore please add component weight, quantity, published material, and replace the default name of the datasheet.
Fix, Check Again – Less Errors

You need to add the weight of material in this screen and the contact person in Supplier Data.
Add Recipient Data

Go to the Recipient data tab.

No recipients assigned to this MDS indicates a Recipient has not been added yet.

The Internal button is the only option available until a Recipient is added. If a User is allowed to Publish, this option is also available.

Click on Add Recipient to find the recipient.

“Add recipient” button

Before recipient added Send and Propose buttons are grayed out.
Select the Recipient

In this case, an Org.-Unit of an example company is highlighted. Please click Apply.

Which one to select? In this case the recipient company has Org.-Units. Theoretically, you should only have to send/propose to a company once because once accepted, it’s available to all in the roof company. You can list a Company Name only once on the recipient list. For example, the system will not allow you to put both IH Automotive and First Org.-Unit as recipients. If sending to an Org.-Unit, make sure that someone in the other company has access to MDSs sent to it. Make sure you have the correct recipient.
Recipient Changes

Note the changes to the screen now that a Recipient has been added:

- More buttons…
- You see exactly where you are sending it.
- Name – this is what your customer will see – not the same as on the Ingredients page.
Enter Recipient Data

Enter recipient specific information: Customer's part number, Description, Supplier code and any other customer requested information.

Supplier Code – Depends on how your customer refers to you – some OEMs have special codes they assign, others use DUNS Numbers, others use nothing at all.

If your customer rejects the MDS and says it is not their part number or you need to change the description, you must change it here as this is their view.

Please check the FAQ on Forwarding for information on this topic.
Recipient Data Decoded

This page contains your customer’s information and status of MDS:

**Supplier Code** – how customer refers to you (commonly DUNS) (required)

**Name** – how your customer commonly refers to the product (required)

**Part/Item No.** – your customer’s number (required)

**Report No.** – if you checked Preliminary MDS you should have an entry here (optional)

**Note:** Certain OEMs have a slightly different data page. Different customers have different data requirements on this page – be sure to check with them on what needs to be supplied.
Send or Propose to Recipient?

Send – You send this MDS only to this customer. The version number will remain .0x until your customer accepts. It is in “handshake” mode.

Propose – You make this part for several customers under different customer part numbers. The version number will go to the next whole number immediately and you can only change the Recipient data information should your customer reject it.
Click **Send**.

Check is successful – you can send with a Warning. Some of the newer Warnings, you cannot correct without making a new version of the MDS.

Click **Send** again.
Result of Send

Send is a 1-to-1 relationship. If your customer wants changes on the tree and it is still in edit mode, you can make changes after the customer has rejected.

If you Propose, the version increases to a whole number and you can not make changes – though you can add more recipients.

Note: If the status is Edit Mode or Modified, you must resend or repropose.
Miscellaneous topics
Semi-component ≠ Sub-Component

Semi-components are basically created the same way as a component except they do not have application codes or parts marking questions to be answered. They are often misused. A Semi-component is not the same as what is commonly referred to a sub-component. If you use something in “one of”, “two of”, etc. you should be making components.

Semi-components can be used for a bolt of cloth, a wire wrap that is cut down, vinyl tubing that is cut from a roll, paint, etc. – something that is used by weight, length, or volume during processing.

In IMDS, sub-components are the same as components.
Adding Semi-component with a Component Sibling

In this particular case, it was first added a component in the tree structure.

When you go to add a semi-component node, you get an IMDS message. Please enter the name of a new node to be placed in this MDS to solve the problem, and select Yes.

With this name a component is added to the tree – thereby maintaining appropriate structure.

Note: While this works if adding a semi-component after adding a component as a child, if you add the semi-component first, you will not get this option.
Adding Weight Characteristics to Semi-components

When creating a semi-component, you have the option of adding a weight characteristic based on length, area, or volume – as well as none.
Adding a Semi-component (Created in Release 7.0 or Later)

Should a semi-component have a weight component defined, the system can now calculate the weight of the semi-component when added to a component.

Enter how many of the specified unit and select Calculate.
In Conclusion – Ask Your Customer

IMDS is a common system for data, but each OEM and many Tier One have their own acceptance criteria regarding:

- Tree structure
- Amount of miscellaneous material allowed
- What goes on the company data screen
- What has to be declared

If a question arises, ask your customer what is required.
Read the IMDS Information Pages

Many questions can be answered from the IMDS Information Pages > Help > FAQ.

The FAQs are available to help you discover answers to common questions without the wait you may experience when calling the IMDS Service Center, who responds to thousands of users and for a question that can be answered by a FAQ, the IMDS Service Center will direct you to read the FAQ.

Familiarize yourself with changes in the system. The login screen frequently has a message about a new release and a link to the release notes.
Create Tips Series

Remember to view all of the presentations available in the Create Tips series:

• Materials
• Components

Location:
IMDS Public Pages > FAQ
Select “How to Tips” from drop-down and Go
Select Where can I find a walk through of creating an entry in IMDS?